Lectures ON THE PHYSIOLOGICAL PATHOLOGY OF THE BRAIN.

Delivered at the Royal College of Physicians of London, July, 1876,

BY C. E. BROWN-SÉQUARD,

M.D., F.R.S., F.R.C.P. LOND., ETC.

LECTURE I.—PART VII.

ON A GREAT VARIETY OF FORMS OF PARALYSIS DUE TO DISEASE IN ONE SIDE OF THE BRAIN.

A lesion in parts of the anterior or the middle lobes of the brain, outside of the supposed voluntary motor apparatus, can produce complete and persistent hemiplegia—A lesion of central parts of the brain or of the cerebellum, without the intervention of any marked alteration of or pressure upon parts of that apparatus, can also produce hemiplegia—Value of those facts against the admitted views concerning the causation of paralysis—Differences, as regards the power of producing paralysis, between parts of the brain belonging to the voluntary motor apparatus and other parts of that nervous centre—Complete and persistent hemiplegia may appear, although disease occupies but a part of the supposed voluntary motor apparatus in the brain—Facts relating to the corpora striata and to the pons Varolii—Contrast between two cases of disease of the pons Varolii.

THE parts of the brain of which I have not yet spoken will not detain us long. I will only say a few words of the middle and the anterior lobes, then of the central parts, and lastly of the cerebellum, leaving aside the convolutions, because in another lecture I will revert to them in a complete discussion of the facts showing how erroneous is the supposition that in some small parts of the surface of the brain there are distinct organs deserving the name of psycho-motor centres. What I have said of the posterior lobe cannot entirely be said of the anterior or of the middle lobes, on account of their containing those supposed centres, and also on account of their contiguity to the supposed voluntary motor ganglions, and of the radiation into them of the fibres of the internal capsule and of the corpora striata. When a lasting and more or less complete paralysis is caused by even a not very extensive lesion located in the anterior or the middle lobes, it is invariably considered as dependent on some alteration of the corpora striata, or of the corona radiata, or of the so-called psycho-motor centres. But, as will be fully shown in another lecture, how can this view be maintained in the presence of facts proving—1st, that a slight lesion of one of those lobes can produce a complete paralysis; 2nd, that a considerable lesion of one or both of those lobes can exist without any marked paralysis; 3rd, that the paralysis due to a lesion in one or in both of those lobes can appear either on the opposite or on the same side?

Many facts show that a lesion in the most anterior part of one of the cerebral hemispheres—i.e., a part where no one places any kind of voluntary motor centre—can produce paralysis more or less complete, and lasting till death. I will mention but two cases, one of a tumour, the other of hæmorrhage. In a case of Andral's,* remarkable in many respects, there was a gradual paralysis, with anæsthesia, in both right limbs, with right ptosis, caused by a small tumour near the anterior extremity of the left hemisphere, the cerebral tissue remaining normal even near the tumour. A lesion such as that should not have produced hemiplegia, as the part of the brain it occupied does not belong to the voluntary motor apparatus. The ptosis and the anæsthesia are also symptoms in opposition to the admitted views. It may be said about this case as well as about any other in which paralysis appeared when no disease was found in other parts than in one of those which do not belong to the supposed voluntary motor apparatus, that although not discovered it existed in some segment of that apparatus. I cannot, especially in cases of tumours, and of slow development of paralysis, deny that it is possible that there is some other alteration of the brain.* But, although possible, there is no proof that there is another alteration, and it is indeed an argument of very little value to maintain that of two lesions of the brain, one not only visible but sometimes a considerable one, and another which is not visible, it is this last one which is the cause of a paralysis! But this argument, even if acceptable for cases of alterations of slow growth, cannot be used about cases in which a sudden lesion, well characterised by symptoms we know to belong to it, and besides found after death, coexists with a sudden paralysis which appears at the same time with those characteristic symptoms. As a specimen of this I will mention another case of Andral's.†

CASE 9.—A man suddenly lost consciousness and fell. On coming out of this apoplectic attack his speech was almost unintelligible, and his face and limbs were completely paralysed on the right side. He grew worse, and died nine days after the attack of apoplexy. The part of the substance of the brain at the anterior extremity of the left hemisphere contained a clot of blood as large as a hen's egg. The clot was at about half an inch from the anterior point of that side of the brain and an inch from the upper part of the surface, and it did not extend to the lateral ventricle, which, as also the corpus striatum, was uninjured. No alteration in any other part of the brain.

In this case no part of the supposed voluntary motor apparatus can be considered as having caused the paralysis, which must have been produced by the lesion found—i.e., a lesion of a part not endowed with the function of originating voluntary movements. *It is clear, then, that paralysis may be due to other causes than a mere loss of function of the part diseased.*

The same reasoning leads to the same conclusion when we find that paralysis can appear and last till death in cases of inflammation, tumour, or hæmorrhage in those parts of the middle lobe of the brain which do not belong to the voluntary motor apparatus. There are many such cases in which a small amount of blood effused either in the lower or the lateral part of the middle lobe has caused a more or less complete hemiplegia, which lasted till death. At random I take out of my notes on this point three cases—one of tumour, the second of inflammation, and the third of capillary apoplexy, in parts of the middle lobe not belonging to the voluntary motor apparatus, and in which there was complete hemiplegia. The first of these cases was published by Moutard-Martin,‡ the second by Brachet,§ the third by Rédier.‖

As regards paralysis caused by disease in the central parts of the brain, especially the walls of the third and fifth ventricles, it is difficult to say that the neighbouring parts, the so-called motor ganglia and the crura cerebri, have not a great share in its causation, as almost always the disease extends to these last parts. Still hemiplegia can appear even when the lesion seems to be equal on the two sides,¶ or greater on the side of the paralysis.** In a case mentioned by Abercrombie,†† paralysis of the left arm occurred in a patient in which no lesion was found, but a clot in the iter ad quartum ventriculum.

As regards paralysis coexisting with disease of the cerebellum, I will only say now that in a number of cases it is absolutely impossible to admit that a pressure on the pons Varolii, and still less on the medulla oblongata or the crura cerebri, has existed, so that it is clear that that part of the encephalon, although not being either a psycho-motor centre

* Clinique Médicale, fourth edition, Paris, 1840, vol. v., p. 1.

* Besides other kinds of alteration, there is one which everybody knows to be rather frequent in old cases of disease of the brain; it is the secondary degeneration which extends all along the base of the brain in certain parts. I am so well prepared to admit that this degeneration, and not the lesion which produced it, may be the real cause of a paralysis, that I will, in another lecture, describe as a distinct form of paralysis one which seems to depend altogether on that degeneration.

† Loc. cit., p. 300.

‡ Bulletins de la Société Anatomique, vol. xxxiv., 1859, p. 98.

§ Quoted by Gintrac, loc. cit., vol. vii., p. 265.

‖ In Recherches sur les Paralysies, par Rendu. Paris, 1874, p. 162.

¶ As in a case of small tumour of the corpus callosum (Albers, quoted by Ladame, loc. cit., No. 174, p. 194).

** As in a case of Queane (Bull. de la Soc. Anat., vol. iv., 1829, p. 36).

†† Loc. cit., p. 266.

or a motor centre like the corpus striatum, or a place of passage of voluntary motor conductors, can give rise to paralysis.*

After this long examination of facts to show that parts of the brain not belonging to the voluntary motor apparatus can give rise to paralysis, it is necessary, before I pass to another argument, to survey, at least summarily, the whole field, and to discuss some points of a general character.

As there cannot be the least doubt that a number of parts of the brain which are not motor (for the sake of brevity I qualify them so, meaning that they do not belong to any part of the voluntary motor apparatus,) have, however, the power of producing a paralysis, I think we can consider as proved that a loss of voluntary movement may be due to quite another cause than the cessation of the function of the diseased part. This being established, it is interesting to know if there are differences between the motor parts of the brain (those which belong to the voluntary motor apparatus) and the parts which are not motor, as regards their respective power of producing paralysis. Facts in very great number clearly show that there are great differences. 1st. Lesions of motor parts of the brain produce paralysis more frequently than lesions of the other parts. 2nd. Lesions of motor parts generally produce more considerable and more lasting paralysis than lesions of the other parts. 3rd. Paralysis due to lesions of motor parts is more frequently allied with or followed by spasmodic rigidity than that which is caused by lesions of other parts.

Are we to find in these differences any proof of the correctness of the old views concerning the mode of production of paralysis in brain disease? Certainly not, as the motor parts are only *more* able than the parts which are not motor to produce paralysis. And if we look at other facts, we find that *direct* paralysis—the existence of which is a death blow to the admitted views about the causation of paralysis—can occur as well from disease of the motor parts as from lesions of the other parts. Besides, we find that considerable alterations and even complete destruction of parts can exist without the appearance, or at least any marked degree, of paralysis, whether the lesion exists in motor parts or in the other parts, or in both simultaneously. And if the supposition is made that each half of the brain has the power to act in place of the other—to replace it in case of alteration preventing it from fulfilling its functions, so that the absence of paralysis, when one side of the brain is alone diseased, would not show that the old views rejuvenated by this supposition must be given up,—then I will say, and will show by and by, that there are cases of considerable alterations of motor parts of the brain on the two sides without any marked paralysis.

From this discussion, and from the facts mentioned about parts of the brain which are not motor, it results clearly that *paralysis can appear otherwise than as an effect of loss of function of the part diseased.* If paralysis in such cases is not such an effect, it must be due to some influence exerted by the part diseased or its neighbourhood on other parts endowed with the power of giving rise to voluntary movements, arresting or restraining that power.

5. *Complete and persistent hemiplegia may appear, although disease occupies but a part of the supposed voluntary motor apparatus in the brain.*—This is a most powerful argument against the admitted views, especially when it is remembered that considerable disease of parts of that apparatus may exist without paralysis, or with paralysis occurring in the wrong place—i.e., on the side of the lesion. I am fully aware that a complete paralysis may be supposed to be due to a pressure upon parts of the voluntary motor apparatus appearing healthy, or to an unfound alteration of those parts, and I have no doubt that such suppositions are often true. But what of cases in which a suddenly produced lesion causes all the phenomena which we know to depend on hæmorrhage in the brain, including a complete hemiplegia, and in which the autopsy shows that there really was an effusion of blood in that great nervous centre? Before giving the indication of some such cases in which the alteration was not very great, I will mention a few other striking, although not so decisive, facts.

Dr. Duncan gave to Abercrombie† the details of a case in which it may seem that there was more extensive disease than what he saw (perhaps the plugging of branches of the basilar artery); nothing was found, however, but "disease of that artery in one spot," and by its side perhaps a somewhat softened spot "no larger than a barleycorn." There had been "palsy of the right side to such an extent that even the intercostals of that side did not act," and convulsions of the left limbs, with loss of vision, and other symptoms.

Andral* relates a case of complete right hemiplegia allied with, if not caused by, no other discovered lesion but a very small (size of a pea) tubercle in the ancyroid cavity, with redness of several convolutions of the left hemisphere near the median fissure.

Abercrombie† gives a case in which aphasia and a complete *right* hemiplegia, followed after three months by a marked amelioration of the power of motion in the leg, while the arm remained absolutely motionless, so long as the patient lived (fifteen years). The autopsy showed that there was a good deal of fluid in both lateral ventricles, but no morbid appearance in the brain, except that the meninges adhered to it and to each other, at a spot the size of a shilling, on the upper part of the *right* hemisphere. No doubt it will be objected that in this case there must have been an unseen lesion in the left side producing at the same time aphasia and a crossed hemiplegia; but, on the one hand, aphasia can appear from disease of the right side of the brain even in people who are not left-handed, and, on the other hand, paralysis may appear on the side of a brain lesion. So that it is quite possible that the alteration found in this case at the surface of the *right* hemisphere was the cause of the paralysis of the *right* limbs and of the loss of speech. But, in case it is supposed that in the left hemisphere there was a lesion, which, although too slight to be seen, had produced the symptoms, I will say that if I admit that supposition my argument becomes perhaps more powerful, as then a lesion too small to be seen had been able first to produce, and then to maintain for fifteen years, a complete paralysis of the right arm and an incomplete paralysis of the right leg.

It would be very easy to show that with limited alterations (due to inflammation, tumours, embolism, &c.) of the intra-ventricular corpus striatum, the crus cerebri, and the pons Varolii, there is often a complete and persistent paralysis. Those cases are too frequent to deserve proofs. I, therefore, will now give a few cases of hæmorrhage in the corpus striatum and the pons Varolii, showing that a limited alteration of each of those parts can produce a complete and persistent hemiplegia. Dr. R. B. Todd‡ gives a case of sudden and complete paralysis of the left side, followed by death after several weeks. In the centre of the right corpus striatum there was a small cavity containing blood and softened cerebral tissue. With the view now generally admitted that the conductors of the orders of the will to muscles only partly pass through the corpora striata, how was there such a paralysis when the lesion not only did not exist outside of the right corpus striatum, but only occupied a part of that ganglion?

Jacquet§ relates that a man was attacked with paralysis of the left side, which persisted till he died, three months after. A cyst, the size of a filbert, containing a rust-coloured fluid, was found in the centre of the right corpus striatum. The rest of that corpus striatum was healthy, as were also the other parts of the brain. How, I will ask again, can there have been such a persistent paralysis when, as it was in the case of Dr. Todd, but still more evidently here, the lesion was so inconsiderable, and when such a great part of the channels between the volitional centres and the muscles remained normal?

As regards the pons Varolii, I will also only mention a few cases. Ollivier‖ gives the case of a woman attacked with complete right hemiplegia, which persisted several years. In the middle part of the left half of the pons Varolii a cicatrix was found, which interrupted the continuity of a part of the longitudinal fibres. The medullary substance around that remnant of a lesion due to hæmorrhage had its normal consistency. Here again, then, we find a complete and long-persistent paralysis caused by a lesion occupying only a part of the motor tract.

* I say paralysis—i.e., a loss of voluntary movement, and not a disorder in the voluntary movements from any supposed defect of co-ordination.
† Loc. cit., p. 208.

* Loc. cit., p. 41. † Loc. cit., p. 249.
‡ Clinical Lectures, p. 629 and 640.
§ Quoted by Gintrac, loc. cit., vol. vii., p. 137.
‖ Traité des Maladies de la Moelle Epinière, vol. ii., p. 184.

In the well-known case of Mr. W. F. Barlow's* there was right hemiplegia and anæsthesia, with paralysis of the left side of the face from a hæmorrhage which was not considerable. Mr. Barlow says:—"On examination no effusion was found in the cerebrum or cerebellum, but a section of the pons Varolii discovered a clot in it as large as a filbert shell, with a slightly softened boundary of nervous tissue. A section of the pons *in the mesial line passed nearly through the centre of the effusion.*" As in this case the patient seems to have been examined carefully, and as she remained conscious, even intelligent, until within two or three hours of her death (which occurred five days after the attack), there is great value in the statements that the right limbs were paralysed, and that the left ones were moved by her will. I have already alluded to this case when I spoke of those instances in which an alteration in the centre of the pons produces an altern hemiplegia. I give now more details about it as it shows clearly that injury to only a part of the motor tract can produce considerable paralysis, besides showing also that the same lesion on the other side may not engender paralysis.

A case of Dr. Roger's† deserves to be mentioned just after that of Mr. Barlow's. A clot in a cavity, the size of a pigeon's egg, was found by Dr. Roger in the posterior and superior part of the left side of the pons Varolii. It hardly extended into the right side. Still the patient, after having been attacked with complete paralysis of the right side, very soon after became paralytic also on the left side. So that if we contrast this case with that of Mr. Barlow's we find that in this last a lesion occupying nearly the same extent on the two sides of the pons produced paralysis of only one side, while in the other case a lesion which was almost altogether in one half of the pons caused paralysis in the two sides of the body. Is it not evident from these cases that paralysis does not always depend on the loss of function of the part diseased, but on the influences exerted by an irritation of the diseased tissue acting on other parts to produce a cessation of their activity?

In the case of Roger's it may be supposed that there was a pressure over the whole pons Varolii exerted by the effused blood. Considering, first, that the tissue of that organ is hard, comparatively to that of other parts of the brain; secondly, that the amount of blood was not very great; and thirdly, that the effusion took place in the upper and posterior part of the pons—i. e., very near the fourth ventricle and far from the place of passage of the conductors of the orders of the will to muscles, this explanation is not to be accepted.

From the above facts and a number of others that I could mention, it is clear that, parts of the voluntary motor apparatus being left healthy, there may be a complete and long-persistent paralysis caused by disease occupying only a portion either of the motor tract or of the so-called motor centres. According to the admitted theories concerning the production of paralysis in brain disease, a lesion of only a part of the tract should not produce more than a partial paralysis, or if at first the paralysis were complete (in consequence, as is supposed, of pressure on other parts), it should cease to be so when the pressure diminishes or ceases—by absorption of effused blood, for instance. Therefore, the completeness of paralysis in some cases, and its long persistence, with or without absolute completeness, in other cases, clearly show how erroneous are the admitted views.

CHRONIC DIARRHŒA OF INDIA AND THE TROPICS.

BY SIR J. FAYRER, M.D., F.R.C.P.

ONE of the most troublesome, tedious, and often dangerous results of residence in India, is a form of diarrhœa, which is liable to be as intractable and obstinate in character as it is exhausting in its effects. Though generally seen in those who have spent many years in hot climates, it occasionally occurs in others who have been there but a short time. It is known as "diarrhœa alba," or white flux—so called from the grey, whitish, light or clay-coloured evacuations, which are frequent, copious, fluid or semi-fluid, often frothy, and occasionally lienteric, especially after any indiscretion in diet; or mixed with mucus tinged with blood, when any fresh source of enteric irritation or congestion may have been induced.

This form of diarrhœa is an evidence of broken-down health in those who have been exposed to certain climatic influences, and may exist irrespectively of obvious disease of liver, spleen, or other abdominal viscus. Its origin is often insidious, commencing with simple looseness of the bowels, with little or no pain, and producing rather a feeling of relief than of suffering; and it may be, not until the subject of it finds he is losing flesh, strength, and energy, that he realises the serious nature of the complaint. It seems to be the result of climatic influences in which, probably, malaria (whatever that may be) is not unconcerned, and is due rather to a general derangement of the hepatic, splenic, and gastro-intestinal functions, than to the usual irritant or eliminative causes of diarrhœa; no doubt these disturbed functions are accompanied by degeneration of structure.

The white or clay-coloured appearance of the dejections is suggestive of deficient or altered hepatic secretion; but this, probably, may be accounted for by the general state of anæmia to which all the organs and the body are reduced, rather than by any actual disease of the liver itself. It is, indeed, only as the disease progresses that the pale colour of the excretions becomes so marked, for in the outset they resemble those of diarrhœa from other causes. The balance between exhalation and absorption seems to be disturbed, and much of the large quantity of fluid that is poured out, or ingested into the intestine, and which, in the natural osmotic circulation of intestinal fluids, should be reabsorbed, is hurried on and, as it were, prematurely expelled: the absorption of nutrient matter is thus interfered with and diminished, and wasting results, as may be seen in the attenuated and exhausted frames of those who have suffered for any time from the disease.

The appearance of persons suffering from this disease is characteristic. They are pale and emaciated, with loose, dry, flaccid, flabby skin, which often in later stages is discoloured as by chloasma or Addison's disease. The fat disappears; the eyes are pearly; the lips and conjunctivæ are blanched; the tongue is dry and smooth, and in advanced stages it appears contracted and shrunk, its papillæ are obliterated, the surface is red as a raw beefsteak, glazed and dry, at times its edges are excoriated, and the mouth and its mucous membrane are the seat of aphthous spots or epithelial proliferation, and so tender and sensitive as to be intolerant of wine or any substance or fluid in the least pungent or stimulating, on account of the burning pain its contact gives rise to.

The earlier phases of the disease are characterised by general malaise—perhaps some evidence of malarious poisoning,—such as fever, neuralgia, or myalgia—distension of the abdomen, especially after food, dyspepsia, irritability of the bowels, which are provoked by the reflex irritation of anything taken into the stomach to expel their contents. There is general languor and feeling of debility both mental and physical, disinclination for work, and all exertion is difficult and distasteful. As the diarrhœa gradually increases, these symptoms may to a certain extent be mitigated, and the patient think himself better; but as the disease insidiously progresses, the strength fails, and sooner or later he finds himself compelled to give up work, and seek recovery in change of climate. The state becomes one of extreme anæmia, and as it goes on, dropsical effusions take place in the areolar tissue of the lower extremities, and may indicate an approaching fatal termination.

A very similar, perhaps identical, form of disease is known in some of the hill stations of India as "hill diarrhœa," and has been well described by Twining, A. Grant, E. Goodeve, and other medical officers of the Indian Service. It often proves intractable, and even fatal, especially to those who have been long in the country, and whose health has previously suffered from malarious poisoning; and occasionally, I fear, it is the result of an injudicious selection of climate

* Transactions of the Pathol. Society, London, vol. iv., 1853, p. 28.
† Bulletins de la Société Anatomique, Paris, 1837, p. 166.

after diseases for the recovery from which a sea voyage or return to Europe was needed. Many of the cases that come under observation here at home trace their origin to a hill station in India, where the sufferer had gone in search of the health which he was more likely to have recovered by a sea voyage or visit to Europe.

This chronic white diarrhœa, then, appears to be rather a general degeneration of all, than a special disease of any particular organ. Anæmia—the result of inanition, and imperfect sanguification, the consequence of depraved function, imperfect absorption, and waste of the nutrient material—is the most marked symptom during life. Examination of the bodies of those who have succumbed to the disease, shows that the wasting which is so marked in the body generally, has extended to the viscera themselves. When death has occurred at an early period, perhaps from the intercurrence of other morbid conditions, the intestines are found contracted, but with the mucous lining thickened and congested, even ulcerated; but when the fatal result has followed long continuance of the disease, and consequent exhaustion, the coats of the bowel are found to be attenuated and diaphanous, the seat of amyloid degeneration, frequently ulcerated in both ileum and colon, the glandular structures thickened or indurated, a condition which is shared by the mesenteric glands, whilst the mesentery itself is devoid of fat, thin, and wasted. The liver is shrunken, pale and contracted, the spleen and kidneys often in a similar condition. There may be, in certain instances, enlargement of liver and spleen, but in ordinary cases of the disease there is no such complication.

Though chronic diarrhœa is frequently the result of general degeneration of health from malarious cachexia, it is not always so, and other sources of enteric irritation or of elimination, caused by disease or disordered condition of the liver, spleen, or kidneys, or chronic dysentery, may give rise to it; but it is of the simpler, though not less serious, form, uncomplicated by other disease, that I now speak of, and for the management of which I would offer a few such suggestions as I have found to be of use.

As I have said, the commencement of the disease is often insidious, and it is allowed to gain ground before radical measures are resorted to for its removal. As to the cases that come under notice at home, the most essential step towards recovery has been taken in leaving India or the tropics, and returning to Europe; but there remains much to be done to further the improvement which happily has often advanced considerably during the sea-voyage.

The successful treatment of chronic diarrhœa depends very much on the patient's perseverance and resolution in carrying out the instructions he receives. Diet is a most important element in it, and this must be strictly regulated; all irritating or indigestible and solid food must be at first prohibited, and only that which is most easily absorbed and assimilated allowed. Milk alone, or, better, diluted with about one-fourth or one-third part of lime-water, given in small quantities and at frequent intervals, say a wineglassful every second or third hour, in some cases more frequently, will generally be found to answer well, and may be continued for a time to the exclusion of all other food. Milk undiluted will seldom agree, as may be seen by its causing increased irritation, frequency of action, and the passage of undigested caseine. Beef-tea, raw beef juice, or other plain animal broth, free from all extraneous matters; a raw egg beaten up with milk, to which a teaspoonful of brandy may be added, will sometimes be tolerated; arrowroot, tapioca, or other plain farinaceous food, will sometimes, but not always, answer. Tea and coffee, as a general rule, disagree, and should be avoided. Stimulants, especially for those who have long been habituated to their use, are often needed; the best are a little whisky or brandy diluted with Vals or Vichy or potash water; but these should be laid aside for plain water if they, as they sometimes do, increase the action of the bowels. Or a little very good port wine may be tried; as a general rule, I find all other wines unsuitable, and would not give them. Regularity in the times of administration and in the quantity of nourishment given is most essential. The greatest care should be taken not to give too much of anything at a time, and at once to discontinue whatever appears to disagree.

It is necessary that the patient should be kept warm, and at an equable temperature day and night. The body should be covered with flannel or woollen next the skin, and a flannel bandage should surround the abdomen. Chills and damp are especially to be avoided; exposure to them may seriously aggravate the mischief; during cold weather the patient should not leave the house.

As the condition improves this discipline may be relaxed, and gradually the invalid may be able not only to go out and take moderate exercise, but benefit by it; until considerable improvement has taken place he should be extremely careful in this respect, and it is desirable to keep as much as possible in the recumbent posture, as mechanical rest for the bowels is a most important element in the treatment. It might be well, if possible, for the patient to reside during the cold months of the year in some of the milder and more sheltered parts of the country; and benefit may result from living near the seaside. The care, attention, comforts, good nursing, and good food of a home, however, are more important than any benefit to be gained from such changes as may be derived from removal to different localities in the United Kingdom, where those advantages might be wanting. As the diarrhœa diminishes, the condition of the excreta improves, and strength is regained, the diet may be more varied, and out-of-door exercise more freely taken. But long after recovery is apparently complete, the greatest care must be taken to avoid errors in diet, over-fatigue, or exposure to extremes of temperature, or a relapse may take place. It is desirable that the stay in Europe should be prolonged, especially after recovery from severe attacks, beyond one Indian hot season at least, and it may be necessary to defer return to India for another year. This will be the case if complete restoration to health have not been established for some months before the time for return has arrived.

As to drugs, they are important in the treatment, but they will do little good if strict dietetic and hygienic rules are not observed. Under the impression—derived chiefly from the appearance of the evacuations — that the liver is mainly at fault, it is sometimes deemed expedient to administer drugs having for their object increase of the secretion of bile, and addressed especially to the liver. This, I think, is unnecessary, as, for reasons before noticed, there is not sufficient ground for supposing that the liver is specially at fault. It appears to me that the chief indication is to restore the general health, the healthy functions of the bowel, to give it rest, to promote absorption, and delay the expulsion of its contents. This we may hope to effect, in early stages of the disease at any rate, by introducing only bland, unirritating, and nutrient fluids, by allaying irritation and checking excited action by the use of well-selected sedatives and astringents, and, at the same time, such remedies as may tend to improve the general health.

For this purpose, and to allay the irritable state of the bowels, mild astringents, combined with opium, are useful. The compound ipecacuanha powder, in combination with bismuth, quinine, and alkalies, is likely to prove a valuable combination; and in cases where the motions are fluid, copious and frequent, the vegetable astringents, such as tannin and gallic acid, are indicated. These may be given in combination with opium or Dover's powder. For the same purpose, sulphate of copper with opium has been recommended, and no doubt with benefit. Other of the vegetable and mineral astringents may be tried, and the mineral acids, the dilute nitric and muriatic, in combination with opium, have been found beneficial where other remedies have failed. Nitrate of silver is sometimes given, but I have not found it to produce very satisfactory results.

Counter-irritation over the abdomen by sinapisms or turpentine stupes is useful, but it is not desirable that so extreme a measure as vesication should be resorted to. Opiate and small demulcent injections into the rectum are often efficacious in allaying the irritability of the bowel and giving rest; the hypodermic injection of morphia may be tried where opiates do not agree; I have no personal experience of this mode of administering the remedy in this disease. Opiates are sometimes objected to for their presumed interference with the secretions of the liver, but this is, I believe, a groundless objection. The colour of the evacuations need not prevent its use, and the rest and quiet that it gives is of the greatest importance. Demulcents are also for a similar reason likely to be useful. Mucilaginous decoctions or infusions, such as those prepared from the fresh bael fruit, or from the Isophgool (Plantago Isophgoola), the seeds of

which are often given with good effect by the natives of India for the sake of their mucilaginous envelope, which, after they are swallowed, is evolved by the moisture of the intestinal canal, and so produces a mucilaginous coating. Solution of gum, water-arrowroot, &c., are likely to be beneficial for both their soothing and nutrient properties.

The preparations of iron are often useful, not only in controlling the diarrhœa, but in improving the condition of the blood, and in restoring health. The iron alum in doses of four or five grains, the citrate or the potas. tart. of iron, in three to five grain doses in some aromatic water, three or four times a day, are good forms in which it may be given; and it may—viewing the malarious origin of so many, if not all, of the cases of the disease—be well to combine quinine with the iron when it can be borne. The combination of two or three grains of quinine with three or four of Dover's powder, and three or four of bismuth, is often very useful. In the earlier stages of the disease—this, however, is not often seen in this country—where there is often congestion, probably hepatic and portal, ipecacuanha in large doses, ten to twenty grains, may be very useful, and indeed may cut short the state which would have passed into diarrhœa. This, however, is quite inapplicable to the disease in its more developed stages.

As recovery progresses, not only may preparations of quinine, iron, and other tonics, according to the discretion of the physician, be beneficial, but change of air and climate to some of the Continental watering-places may be of great advantage in expediting recovery, not only for the sake of the waters, chalybeate or other, which undoubtedly are beneficial, but for that important element in the furtherance of recovery from nearly all chronic diseases, "change," and for the regulated mode of life, food, drink—the physiologically correct life in short, and the mental tonic imparted by the determination to get well.

I have not entered into much detail in reference to particular drugs. This may be left to the discretion of the medical adviser, and will be modified by the peculiar circumstances of each case. I think that, generally, the plan I have suggested will prove successful in cases that have not advanced beyond the less severe stages. In those where the emaciation has made great progress, where the tongue is always red, smooth, and glazed, the mouth dry or aphthous, the diarrhœa constant, and the exhaustion great, one cannot but feel the greatest anxiety and uncertainty as to the result; though even then it is seldom that one feels compelled to declare that the case is hopeless. The diarrhœa may disappear in this condition, giving a delusive appearance of improvement, which is not unfrequently the precursor of death. Happily a great number of chronic diarrhœa cases have a more favourable termination, and they generally are so in proportion to the care with which the patient adheres to the plan of treatment laid down for him.

FOREIGN BODIES IN THE AIR-PASSAGES.

TWO CASES.

BY ROBERT J. SPITTA, M.D. LOND.

THESE cases will derive an additional interest by contrasting them at the outset. One was from a piece of slate pencil of the size and shape represented in Fig. 1, which became immovably impacted in a large bronchus; the other resulted from a button-screw,* as shown in Fig. 2, which was ejected, with complete recovery. Tracheotomy was performed in the latter case only.

FIG. 1.

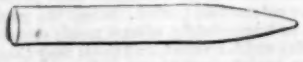
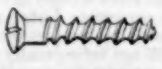


FIG. 2.



CASE 1.—Mrs. M——'s child, aged one year and ten months: Nov. 28th to Dec. 6th, 1862, inclusive. In this case there was considerable but not very violent choking during the passage of the foreign body through the larynx and trachea, but comparatively little cough or dyspnœa afterwards. It took a course, point downwards, to the *left* bronchus, in which it impacted itself so firmly as to plug that tube completely. This caused pneumonia, of which the patient died on the eighth day after the accident. At a post-mortem examination I removed the pencil from a large bronchus, and exhibited it at the coroner's inquest.

CASE 2.—Mrs. H——'s child, aged two years and a half. This second case is of far greater surgical interest, being, as respects its favourable termination, unique. On Jan. 17th, 1876, at 5 P.M., I was summoned to see the child, who was reported to be "choking from having swallowed a nail." I arrived within twenty minutes after the accident; but as I entered the house the child was relieved. Mrs. H—— stated that till the very moment before I knocked he was suffocating from a button-screw, similar to that represented. From this account it seemed more than probable that a foreign body had passed into the larynx; but, finding the patient so perfectly comfortable, I indulged the hope that it had been jerked into the pharynx during the choking fit from which he had just recovered, and that he had then really swallowed it. With this hope, I ordered a dose of castor oil, and desired a strict search to be made into every evacuation, received in water.

Jan. 18th.—A restless night, but the child had neither dyspnœa nor cough, and was running up and down stairs without any distress whatever. The oil had acted, but no screw.

19th.—Ominous large moist bronchial sounds were now heard on both sides; but notwithstanding these, there being neither cough nor dyspnœa, I still clung to my former hope that the screw had been dislodged. On the following day, however, the third after the accident, the typical symptoms of the case commenced, the first attempt being then made to eject the foreign body.

30th.—Much uneasiness and cough during the morning, but at 3 P.M. such a violent attack of dyspnœa and cough occurred as to induce Mrs. H—— to send for immediate help, thinking that the child was actually choking. My son, Mr. Edmund Spitta, late Demonstrator of Anatomy at St. George's Hospital, was promptly in attendance, and the attack passed off in about twenty minutes; but from his account of the severity of the seizure, I thought it desirable to have a consultation as to future treatment. This was held at 7 P.M., and both he and my other partner, Dr. Locke, came to the same conclusion as myself, that the screw was lodged in some large bronchus of the right side; and we decided that whilst the respiration was quiet we ought to operate, in the hope either of extracting it at once, or at all events of providing another opening for the transit of air in case of any reflex closure of the glottis. Accordingly, at half-past seven, tracheotomy was performed by my son, assisted by myself, Dr. Locke kindly presiding over the chloroform. After the operation, which offered no special difficulty, the child was everted and shaken rather roughly to dislodge the screw, but without effect. We then tried to reach it by means of a probe carefully introduced, but also ineffectually, although the trachea had been opened as low as possible. The tube was then adjusted, and the little fellow put to bed in a warm room in comparative comfort, and wearing, as we all thought, a less anxious countenance, and a less dusky appearance of imperfectly aerated blood, than before the operation.

21st.—My son watched the case during the night, when all progressed favourably, and the next day (22nd), the voice having returned, the breathing being easy, but there being unnecessary irritation from the instrument, he took out the tube without closing the aperture.

23rd.—At 8 P.M. I had the pleasure of meeting Mr. Bond, of Westminster Hospital, who was requested to see the case. He cordially concurred both in the diagnosis and treatment. The prognosis, however, we thought gloomy. The ejection of the screw seemed improbable, and its becoming encapsuled was suggested as the only favourable result attainable. Nature, however, took a more sanguine view of the case, and conducted it to its termination with complete success. She first embedded the screw, and then having surrounded it with mucus so as literally to convert it into one large slippery pellet, quietly landed it in the child's mouth, to the astonishment and admiration of all. But I anticipate.

24th to 28th.—During these next five days, the little suf-

* This screw is now in the museum of St. George's Hospital, in company with Brunel's half-sovereign.

ferer seemed at his worst. The discharge through the wound was profuse and most offensive. The pulse was hardly able to be counted, and the respirations above 60. His face was flushed with hectic, his appetite failed, his prostration became excessive, and every night brought its fearful attack of coughing and dyspnœa, lasting about half an hour. The chest presented large moist bronchial sounds everywhere, interspersed with occasional wheezings on the right side, and both Dr. Locke and my son observed at their separate visits that the breathing was always supplemental on the left side. We all thought badly of the child during these five days; but, in reality, nature was prosecuting a cure by ulcerating a bed for the screw, with a view to its future expulsion.

29th.—This morning, at 2 A.M., the worst seizure of all occurred. It was so violent as to induce Mrs. H—— again to send; in expectation, a second time, that the child would be choked before we arrived. My son attended, and the attack subsided, but not until it had excited vomiting, and caused a discharge of the contents of the bowels. But from this moment the case took its favourable turn. The pulse became natural, and the breathing easy. The moist bronchial sounds were less extensively heard, and the fits of coughing became diminished both in number and severity. The wound granulated itself together daily till, on February 11th, exactly three weeks after the operation, it was perfectly closed. The appetite returned in vigour, and the little fellow was cheerful and playful, and altogether seemed quite convalescent.

Two more reports will complete the case.

Feb. 17th.—Coarse, sonorous rhonchi were noticed on the right side, so loud as to be heard on the left. But the child showed no discomfort, and he was allowed to be about as if in health.

19th.—On this memorable morning, one month and two days from the accident, after moderate coughing, the screw was lodged in the child's mouth, and Mrs. H—— received it into her hand, but so enveloped in mucus as to be unrecognisable. Two hours afterwards we heard the respiratory murmur, which had been completely overpowered during the whole illness, quite normal, and nearly equal on both sides.

In closing these cases the only remarks necessary to make are in reference to tracheotomy. Was the operation advisable, seeing that we were unsuccessful in extracting the screw? To this question I answer without hesitation that it was not only advisable, but peremptorily called for, and of the greatest service. In the first place we might have reached the screw, and have put an end to the case at once. But independent of this too fortunate alternative, the operation still fulfilled its three following most important objects. It secured the transit of air during the child's attacks; it provided an easy exit to the putrid exhalations of ulceration; and, lastly, it gave the strongest sense of satisfaction to the parents as well as to ourselves, that, supposing the case had terminated unfavourably, nothing had been left untried.

Clapham-common, S.W.

ON CHRONIC ULCER OF THE STOMACH.

BY JOHN RICHARD WARDELL, M.D., F.R.C.P.,
SENIOR PHYSICIAN TO THE TUNBRIDGE WELLS INFIRMARY.

(*Continued from p. 317.*)

OF the examples recorded, five out of the six were in females; bearing out what has already been said of the very decided proclivity of that sex to the disease. Their ages ranged between twenty and forty; and all were of notably anæmic aspect, and had previously been out of health. The young woman Caroline T—— looked less cachectic and presented a more normal appearance than any of the others. The second and third cases had lost flesh and looked somewhat emaciated, but the same remark could hardly be applied to the others. Thinness and wasting are by no means the invariable concomitants in this affection; indeed, it may obtain in those who are plump, fully furnished, and who do not give outward evidence of organic mischief. When, however, the ulcerated surfaces are extensive and the process has been long continued, the patient loses volume, is flabby, and exhibits declension of strength and change in the organism. It sometimes happens, however, that cases are presented in which the emaciation has gone on to an extreme degree, and in such examples we are inclined to suspect malignancy; the negative facts, such as the non-existence of palpable tumour, the clinical history, the age of the patient, with other particulars, will aid in the direction of diagnosis. There is, however, often very great difficulty in pointing out the diagnostic differences between this affection, that of cancer, and that of chronic gastric catarrh; and more especially when the vomiting and sickness have not been considerable, when there has been no hæmorrhage, and when emaciation does not obtain. Again, the same kind of uncertainty is felt in chlorotic young women who labour under dyspepsia, who are subject to cardialgia, whose uterine functions are irregular, and who complain of variously located neuralgic pains. The physician may, perhaps, in such perplexing instances be somewhat guided in his judgment by a strict observance of the nocentia or juventia. The continuous and careful employment of alkalies, if followed by benefit, would naturally indicate the probabilities as to the nature of the disease existent. In all the instances of this malady it will be found that the prominent subjective symptom is that of *pain*, which is described under varying degrees of expression and differing figurative epithets. Sometimes we are told it is a constant, wearying, grinding, and sore pain, or a dull aching sense of uneasiness, which at intervals, and more especially after food, becomes increased; some speak of it as tearing or burning; and others use terms to signify its sudden, sharp, and stabbing character. In some examples the patient refers its seat to the entire epigastric region; but, according to my own experience, it is more frequently ascribed to a given and limited space, especially at the situation immediately below the ensiform cartilage. It is not uncommon for darting and lancinating stabs to be felt through, high up, as far as the interscapular space, or at the lowest dorsal and first lumbar vertebræ; and sometimes the pain radiates towards the hypochondria or umbilicus. In these cases all complained of pain after eating, and in particular at the circumscribed locality just named. The attacks of gastrodynia seemed to be not a little modified by the kinds of ingesta, and it will be found, as a rule, that rough and solid food most readily provokes suffering. There is generally, as the accompaniment, more or less of pyrosis; and not unfrequently, as in malignancy, the eructations are copious, persistent, and sour. The gastorrhœa will vary much, according to the kind of nutrients which are taken; in other words, correlatively with the stimulus or excitation given to the digestive surface. In passing, it may be observed that in some exceptional instances the introduction of food into the stomach for a time seems to arrest or mitigate the gnawing sensation experienced; but I think such very exceptional, and the contrary is quite the rule. In the great majority of examples there is greater or less immunity from pain when the organ is empty. In mere cardialgia and spasmodic attacks at the epigastrium pressure will often confer a kind of comfort, or at least not augment the suffering. In ulcerations of the gastric surface even slight manipulation gives rise to tenderness, and it sometimes happens that the localised soreness is so excessive that the least touch is instantly complained of, nothing tight can be worn round the waist, and sometimes even the mere weight of the bedclothes cannot be borne. In young, nervous, and sensitive women these kinds of instances are, though with some rareness, observed; and still more exceptionally in such patients the pain may be so acute as to give rise to syncope or epileptoid seizures, and some writers have said that such events are most prone to supervene during the catamenial period. When the pain seems to come on with or immediately after a meal, emesis will not infrequently give sudden relief, and there may then be comparative comfort experienced for some hours. The organ then becomes relieved of its burden, its physiological action is not excited, and its quiescence does not provoke suffering. It must be held in mind that this symptom, pain, is not an infallible index to the extent and seriousness of the malady; because such symptom may have obtained in great or even in distressing degree, and have been of long continuance, and recovery eventuate; and because in

certain exceptional cases it may have been neither marked nor absolute—when a mere sore, dull uneasiness has been experienced,—and yet a sudden and fatal issue has eventuated. The intensity of the paroxysms, doubtless, depends mainly upon the greater or less invasion of the nerves in the course of the ulcer, just as hæmorrhage depends on the greater or less crossing of vascular branches at the seat of ulceration. The reader may here also be reminded that pain to some degree may remain as an irremediable and abiding result after healing and cicatrisation have taken place. There may be left such puckering up of the gastric tunics as to markedly narrow the cavity of the organ at one particular part; and as these ulcers almost invariably elect the smaller curvature and the vicinity of the pyloric orifice, it is by no means impossible, and is indeed sometimes the fact, that permanent stricture is established, which is not only rendered a constant source of pain, but may also be such as to effect an amount of narrowing which so interferes with digestion and nutrition as to bring on gradual wasting and at length death; or the digestion may only be affected in a modified manner, and the greater end of the stomach, by the partial obstruction, may become unequally and unsymmetrically dilated, when a rounded fulness of contour is the outward and tangible effect at the epigastrium. Some sparse examples of what is now described are to be found recorded in the literature of this subject; and certain pathologists have named this kind of stricture as the hour-glass form of contraction. From what has now been said, it is evident that a right estimate is always to be made of this symptom, and its kind and quality to be considered as the aim in diagnosis. There is pain in gastric catarrh; but in gastric catarrh the feeling of discomfort and uneasiness is more diffused and not so acute. In mere cardialgic attacks attention to the ingesta will ere long point to the real nature of the ailment. In the obstruction consequent upon inspissated bile and gall-stones, the mode of accession, the concomitant conditions pointing to hepatic disorder, and the often sudden and final cessation of the suffering, will guide our decision. Again, other negative as well as positive facts will aid in the conduction to a correct inference. Ziemssen says it is often associated with tuberculosis and chronic pneumonia, and also that affections of the endocardium have been known simultaneously to occur; and Siebert refers the primary cause to derangement of the nerves proper to the stomach, whereby vascular circulation and the nutrition of the organ are in due order morbidly influenced.

In all these cases there were *sickness* and *vomiting*. In the young lady, the third example given, such obtained in a very aggravated degree, nor did any remedies prove of much avail. The suffering thus produced was very distressing. Towards the end of her illness the simplest and blandest nutrients could not be retained. This constant irritability of the organ, and at length its non-retention of food or liquids, ushered in the beginning of the end; emaciation and loss of strength became more and more marked, until vitality was, as I have said, slowly but gradually extinguished. Vomiting has, and correctly, been considered to stand next in frequency to pain. There are, however, as if to prove the rule, some very exceptional cases from time to time observed in which sickness hardly, or at all, comes on. So far as my own experience extends, I have never known one instance of this disease in which nausea or vomiting had been absent. The time after food at which the organ's ejection of its contents occurs differs. If the ulceration happen to be near the cardiac opening it is likely to come on quickly after the ingesta have been taken; if in proximity with the pyloric end, an interval of some time may intervene—that is, when the digestive process shall have progressed, and the contents begin to pass into the duodenum. It is worthy of note that in these few cases, where it is presumptive the ulcer is towards the cardiac end, there is a simple ulcer, absence of dysphagia, the œsophagus maintains its action, which is unlike that which occurs when there is malignancy at the cardiac orifice. There is now in one of my beds in the infirmary a woman between thirty and forty years of age who has the most suspicious symptoms of carcinoma at the lower end of the œsophageal tube. She came into the institution greatly emaciated; the sickness was immediate after the attempt to swallow food, and she complained of constant and deep-seated pain at the pit of the stomach. Mr. Cleland Lammiman, the house-surgeon, attempted the introduction of the tube of the stomach-pump, but the end would not pass into the stomach. He dexterously succeeded, however, in getting the end of a thinner bougie to pass beyond the stricture, and, in the course of time, such dilatation has been effected that a much larger tube will now pass into the cavity. She can now take a tolerable amount of nourishment, and her appearance has greatly improved. But the prognosis renders ultimate recovery very doubtful; and I have here incidentally mentioned the case of this woman because sickness has been, and still is, a prominent symptom, yet the case is evidently not mere gastric ulcer. To resume from this digression. It is quite in accordance with physiological experiments and the observance of facts that ulceration of, or near one of, these outlets is more likely to give rise to this so-called anti-peristaltic action. The terminal filaments of the pneumogastric there receiving irritation and excessive stimulus, those wave-like contractions of the muscular walls of the digestive tube generally arise with more force; and through the sympathetic influence of the nervous system the associated movements of the abdominal muscles and the diaphragm come into play, and the organ is relieved of its contents. Henoch has aptly observed that attention to this fact holds good with regard to other hollow organs; that reflex movements are prone to supervene when there is localised irritation near their openings, as when such is present at the neck of the bladder, or when tenesmus is produced by some disease in the rectum or at the anus. Vomiting is a reflex function—the pneumogastric filaments being the efferent nerves, the medulla oblongata and cord the excitable centres—and becomes an excito-motor act by the kind of local stimulus which this disease confers. The ejected matters will, of course, in their character partake very much of the last kind of nourishment which has been taken, and will be influenced according to the time to which they have been subjected to the gastric secretions. They may consist of food slightly altered, of acid or neutral fluids, mixed more or less with mucus or blood, and the microscope not unfrequently detects epithelial scales, pieces of elastic fibres, or those parcel-like formations which Goodsir discovered and named sarcina ventriculi. In those instances of chronic ulcer of long standing, and in which sour eructations have been a persistent and troublesome symptom, the epitheliums covering in the mouth becomes removed, and the tongue is rendered red, fleshy, and fissured, and with these conditions there is generally great thirst.

In four out of these six recorded examples *hæmorrhage* came on in most alarming degree, and in one, as it has been seen, was rapidly followed by a fatal issue. This event is so characteristic of ulceration in this cavity as by some to be regarded as a pathognomonic symptom; but it can hardly thus be considered, as blood from varying parts may pass out of the stomach when there is even no abrasion of the gastric lining; or it may be capillary exudation, and even profuse. The loss of blood from the ulceration now spoken of may be quite insignificant; it may be a mere exudation or in trifling amount from the crossing of the extreme vascular terminations in the submucous tissue, and under the control of the ordinary astringent remedies. Sometimes, as Cruveilhier and Frerichs have remarked, it may come on in active manner when the general venous system of the stomach is rendered hyperæmic and turgid, as it sometimes is from splenic and portal engorgement. And thus if there be obstruction of the liver or spleen simultaneous with this affection, the event of hæmorrhage becomes far more probable, and may be looked for in great excess, and when such organs are relieved of their turgor the gastrorrhagia subsides. It may be held in remembrance that in chlorosis there is increased friability of the vascular walls. When the ulcerative process happens to invade one of the larger trunks of the gastric arteries, very copious amounts of blood are then with much suddenness poured into the cavity of the viscus. The gastric, pancreatico-duodenal, coronariæ ventriculi, gastro-epiploica dextra, splenic, or hepatic arteries, or even the portal vein, may thus be opened. This contingency is generally such as to induce the final cessation of the heart's action. According to Murchison, when one of these branches is but minutely perforated, fatal hæmatemesis may ensue. And it has been shown by examination after death that the orifice from whence such a large outpour of the vital fluid issued was as minute as to be hardly

discoverable. Of fifty-two fatal cases collected by Brinton, in twenty-four the ulcer was seated at the smaller curvature, in seventeen in the posterior surface, in six at the pyloric end, and only in two on the outer surface. In the fifth case now given the place of perforation and fatal hæmorrhage was at this very exceptional situation, at the anterior surface of the larger curvature. Again, in certain of the more chronic cases, in which morbid union has eventuated between the ulcer and adjacent structures, as when it becomes attached to the left lobe of the liver, the pancreas, or omentum, rupture of the vessels proper to such structures may by the extension of this morbid process give way, each in the same termination. A full meal, coughing, vomiting, or straining at stool, may be followed by hæmorrhage. In the first of the above cases, when the hæmorrhage came on the lady described the sudden and peculiar feelings which she experienced as a sense of "coldness and fluttering at the pit of the stomach." She soon afterwards complained of being "chilly and faint," and in no great length of time sickness came on, and to her dismay she threw up a quantity of pure blood. Very similar descriptions were given of the first feelings of this event by the next patient. She had also a sensation of fluttering and fulness at the stomach. In the last recorded example the pulse, countenance, and general appearance of the patient gave indication each time when the blood began to be poured into the stomach, as soon afterwards more blood was vomited. This lady, prior to the return of ejection, by her peculiar feelings at the epigastrium, expressed a certainty of a recurrence of the vomiting. When such large losses of blood take place in the organ, more or less is always passed by stool. The evacuations for many days may present a tarry or pitchy appearance, and not unfrequently the dejections are rendered extremely offensive. The colour of the blood vomited is by no means of uniform appearance. Sometimes it is a light scarlet fluid, evidently showing its unmixed arterial quality; in other instances it becomes acted upon by the gastric secretions, or it may be by the medicines administered, and if it should for some time collect and lie in the cavity, it may be ejected in the form of a dark or grumous liquid or in black coagula. The presence of these coagula, as I have remarked, seems indicated by a sense of weight and oppression at the epigastrium. Sometimes they give rise to a feeling of coldness, and there is no doubt that more or less of the fluid thus removed from the circulation becomes digested. Lastly, in speaking of this symptom, when we have reason to regard the case as one of ulceration of the stomach, and when sudden prostration comes on, with pallor of the countenance, feebleness of the pulse, loss of heat at the surface, impaired vision, and tendency to syncope, it then becomes exceedingly presumptive that hæmorrhage has taken place, though no vomiting of blood reveals the fact; and in such instances the alvine evacuations should be carefully examined. It may here be observed, as a matter of great practical importance, that cases sometimes are seen in which, in the manner spoken of, there are great losses of blood when hæmorrhage is not even suspected. The practitioner may be hastily sent for, most likely in the case of a cachectic and anæmic woman, or a pale and delicate-looking man, who is reported to have fainted, and on arrival there may be all the conditions of absolute syncope. It is related that such a one had for some time lost colour and been out of health, but complained of no pain, and had only been affected with weakness. There may have been no sickness, no vomiting, no epigastric uneasiness, nor any other localised suffering. We are told that giddiness, dimness of sight, and fainting came on without any apparent cause, and it may be that the same condition of things, within no great length of time, had occurred before. On subsequent examination of the thorax, the physical signs are natural, with the exception of a weak and over-exerted heart; no tumour, no tenderness, nor anything palpably abnormal, can be discerned in the abdomen. The cause of this unaccounted-for occurrence is vaguely and unsatisfactorily referred to general debility. In such instances we should always be suspicious of the loss of blood into the alimentary canal: the bleeding orifice may be within the gastric cavity, and yet no vomiting; or it may be from ulceration in the duodenum, the colon, or other part of the lining membrane of the intestines; and the solution of the difficulty often alone lies in examination of the stools, when melanotic evacuations tell the tale of the real cause of that which had been ambiguous and ill understood. I am quite sure that attacks of the kind spoken of more frequently occur than is generally supposed; and I repeat, in faintings and syncope thus spontaneously coming on, the evidence to be gained by the dejections should never be omitted.

(To be continued.)

A SIMPLE MODE OF FEEDING SOME PATIENTS BY THE NOSE.

BY CLEMENT DUKES, M.B., B.S. LOND., M.R.C.P. LOND.,
MEDICAL OFFICER TO RUGBY SCHOOL.

I FIRST had to resort to some means for feeding a little child during the time I was resident medical officer at the Hospital for Sick Children, Great Ormond-street, in a case of phagedænic ulceration of the soft palate after scarlatina, under the care of Dr. West, the pain being so acute when any nourishment or medicine was put in the mouth that the child would take nothing; but by the process I am about to describe I was enabled to feed this child regularly, without terrifying or hurting it. Also, for a case of collapse in pneumonia in a child, when the patient was past swallowing naturally, I was able to revive him again for a time, and cause hope that he might have rallied permanently. By its means we obviate the use of *instruments* for feeding by the nose; also the use of injections per rectum in many cases; and in cases of poisoning we can pass what fluids we wish into the stomach when the stomach-pump is not within reach, or is unsuitable, and the patient cannot or will not swallow naturally.

The kind of cases where the process will prove of greatest service are mania, delirium tremens, diphtheria, croup, stomatitis, cancrum oris, &c., and for fasting girls and spoilt children, who, when ill, refuse food.

The *advantages* are—(1) simplicity; (2) freedom from danger, or risk of accident; (3) imitation of the natural process of deglutition.

The *apparatus* is—(1) a yard of india-rubber tubing of one-eighth of an inch bore; (2) a bottle of any kind (an ordinary soda-water bottle does well); (3) a piece of twine to tie the tube in the bottle, so that the end of the tube reaches almost to the bottom of the bottle.

The *nutriment* (or *antidote* if required) should be warmed as a rule, and put in the bottle, about half a pint in quantity, and may be composed of milk, or eggs and milk, beef-tea, stimulants, medicine, &c., as desired.

Its *mode of action*, represented in the accompanying outline, is that of a syphon. 1. The bottle with the fluid in it is held or fastened above the head of the bed; the patient lying on his back without a pillow. 2. The tube is exhausted of air by laying hold of the tube close to the mouth of the bottle with the finger and thumb of the left hand, and running the finger and thumb of the right hand along it, closely compressing it while doing so; the fluid of course following the motion of the hand, when the pressure of the left hand is removed. 3. The free end of the tube is then passed *just within* the nostril, and retained there with the left hand, while the right has the tube closed by the pressure of the finger and thumb. 4. By alternate compression and relaxation of the tube an ordinary mouthful of fluid can be allowed to escape at a

time, permitting each quantity, if desired, to pass into the stomach before another gulp is liberated.

I have also found this a very convenient apparatus for washing out the nasal cavities, as, for example, in chronic catarrh, fetid secretions, ozœna, syphilitic ulcers, certain cases of diphtheria, epistaxis, and when foreign bodies have been retained in the nostril. The tube is inserted in one nostril, as above, and held by the patient; the head is now inclined *forwards* over a basin; the fluid, which may be either water, carbolic wash, black wash, or solution of perchloride of iron, &c., enters the one nostril and passes by the posterior nares into the other nostril, in a continuous gentle stream, without any of it falling into the pharynx, provided the head be inclined well forwards; the nostrils are thus well washed out, or in the case of epistaxis, an astringent being used, are plugged.

Rugby.

TETANUS FOLLOWING SUNSTROKE.

By JAMES MORE, M.D.

B——, a good-natured, placid-looking hind, while working in a turnip field during the intense heat of July, was seized with giddiness and great prostration. This occurred on the 22nd of July, and in spite of these symptoms and a general feeling of malaise, he kept to work, but had finally to give in on the 26th with decided symptoms of locked jaw.

It was on the morning of the 27th July he was first seen by my assistant, and the pre-clinical history given was such as just detailed, together with the fact that two days before (25th), while attending a prayer meeting, he was seized with a convulsive cough, clenching of the jaws, and a general contraction of the muscles of expression—so much so that he had the appearance as if he were weeping bitterly. He had likewise had a "convulsive fit" during the night, and the description given of this attack by his wife (a fairly intelligent woman) led to the belief that the attack must have been opisthotonos.

On the morning of the 29th I was hurriedly sent for to see him again, on account of a second terrible convulsion. This attack was over when I reached the house, and the appearance he presented to me was such as is partially indicated above. Naturally he had a round, full, placid face, a face more expressive of animal contentment than of human passion or feeling. But what a change! I should not have known him. His face was now deeply furrowed, and expressed the deepest misery and despair. His eyes were almost closed, the outer corners of the eyelids, ending in deep fan-shaped furrows, and furrows deep enough to hold one's finger extended from the malar prominences down each side of the mouth. The right pupil was partially dilated, and neither answered very freely to the stimulus of light. His jaws were almost completely locked, and now and then, more especially when falling asleep, went down with a tetanic snap, bruising and lacerating the tongue, which seemed to be forced between the teeth. He was quite conscious then, and, I may add, through all the attacks he had. He complained of no decided pain, but of a feeling of weight at the back of the head, and of great diaphragmatic uneasiness. He could swallow liquids only, and these in the smallest quantities and in the slowest manner. I saw him taking some milk, and ere he had one ounce down a hydrophobic kind of spasm seized him, his head went back with a jerk, his colour became livid, and he again appeared on the verge of a general tetanic convulsion. This train of symptoms almost invariably followed the attempt to drink, and I concluded there was tetanic spasm of the pharyngeal muscles, allowing fluids to get into the larynx, and irritating or causing spasm of the glottis. This idea was strengthened by the fact that it was only when he was standing bolt-upright on the floor that he could get down any fluid at all. The fluid was not then swallowed, but simply poured down the "tetanic" tube into the stomach. He had no rash, with the exception of about a dozen rose-coloured spots, slightly raised above the level of the skin, round each knee, and quite symmetrical in distribution. His skin was generally moist, and at times bathed in perspiration, but at no time of the attack was the temperature excessive, not being higher than 99° F. in the morning, nor 100° in the evening. The pulse ranged from 90 to 100, was hard and full, and to the last quite regular. The bowels were constipated, indeed had not been opened for a week, but during the last and fatal attack of opisthotonos, which occurred on the 31st, he had a sudden evacuation, not only of fæcal matter, but of semen.

And so he died, just ten days after the attack of giddiness in the field, and I should say he died asphyxiated. Altogether, he had four attacks of opisthotonos, and, with the exception of the last and fatal one, which took place at nine A.M., they occurred between three and four in the morning. During the intervals of these attacks he was fairly comfortable, though the trismus continued with greater or less intensity. All through his illness the tetanic grin never for a moment left him, and his face had quite the appearance of a cast in bronze. I saw him half an hour after death, and found his face had assumed its wonted placid and unruffled expression; indeed, the body was still warm and perfectly flaccid.

The treatment adopted was one I had found eminently successful before* in treating cases both of traumatic and idiopathic tetanus, and consisted mainly in the administration of large doses of opium and belladonna, turpentine enemata, with chloroform liniments applied freely to the muscles or groups of muscles affected.

In an *outré* case of this kind, where the only and apparent cause of the disease is different from what it usually is, certain questions naturally suggest themselves to the mind of the practitioner before he can arrive at a satisfactory diagnosis. Thus the severity of the pharyngeal spasm and manifest distress in swallowing fluids might have led up to the diagnosis of hydrophobia; but in the latter we have no tetanic grin nor locked jaw, nor indeed could I make out any history of a bite or wound of any kind. There not being even a scratch on his body, the idea of traumatic tetanus was necessarily eliminated from the diagnosis. But, in these days of wholesale murder, might it not have been a case of poisoning by strychnine? But here, again, we are met with the fact that in poisoning by strychnine there is no decided locked jaw; and we should likewise expect the more severe tetanic convulsions to be well pronounced—if not from the first, at least very shortly after the administration of the poison. But here, though he had trismus and the tetanic grin on the 25th, it was not till the morning of the 27th that the general convulsions appeared. And, lastly, the whole surroundings of the case negatived the idea of poison. He was the head of a household and father of a large family, the latter looking up to and depending on him for their daily bread. Instead of a gain, his death was a dreadful loss and calamity, for it at once rendered them paupers and dependent on the parish.

Rothwell, Northamptonshire.

CASE OF ANEURISM OF THE ABDOMINAL AORTA.

By Surgeon JOHN C. LUCAS,

IN MEDICAL CHARGE OF H.M.'s 24TH REGIMENT, N.I., ETC.

THE patient, Private Nanoo Parub, aged thirty-nine, in service twenty years, gave the following account of his case: That he enjoyed excellent health until about eight years ago, when, serving with the regiment, then stationed at Dharwar, he first began to feel the sensation like the pricking of pins and needles in his stomach (pointing to the epigastric region). This was attended at the time with vomiting directly after meals. He has frequently been admitted and re-admitted under the care of the various medical officers who have since been in charge of the regiment. In July last he was admitted into hospital under my care, and after a stay of twenty days was discharged with the recommendation for light duty. He was re-admitted again on the 8th of August, complaining of pain in the belly, vomiting, &c.

On inquiry and careful cross-questioning, no sort of traumatic history could be elicited. The man, however, stated that his father died rather suddenly after ailing for some time from similar symptoms. The patient is an in-

* THE LANCET, Feb. 20, 1869.

telligent sepoy, about 5ft. 7½in. in height, but of somewhat spare muscular development. On inspection, patient lying on his back, there was no visible pulsation, but palpation revealed a pulsating tumour of about the size of a hen's egg, situate about an inch to the left of the umbilicus; but, on account of the immobility and resistance of the abdominal muscles, much information as regards the characteristics of the tumour could not be derived from palpation alone, beyond its expansile pulsation synchronous with the radial pulse. Percussion (after an aperient) over the pulsating area was dull. On auscultation no murmur was audible in the horizontal posture, but on making the patient stand erect with the arms hanging to the side, just as in the attitude of "standing to attention," a harsh but not loud systolic bruit was heard over the dull and pulsating spot, and seemed, to a certain extent, prolonged, but heard less distinctly along the course of the aorta superiorly. In addition to the above he had intermittent neuralgic pains, shooting in different directions downwards towards the thighs, the left more especially, and upwards towards the stomach and thorax; beyond these signs of nerve-pressure there appeared to be no pressure exerted on veins, as shown by the absence of anasarca. I may state that in this case the subjective feeling of uncomfortable pulsation was well marked; the patient was likewise well conscious of a cold sensation in the hands and feet.

Physical examination of the heart pointed to dilatation of its right cavities. The radial pulse was small, weak, but not intermittent. The kidneys were healthy, and so were the other organs.

Treatment.—The patient was cautioned against any undue exertion. The digestive organs were attended to by occasional aperients and dry regulated diet. The pain was relieved by belladonna plasters. A mixture of iodide of potassium and iron was ordered. On account of the dangers which might result from resorting to mechanical interference, I did not venture to attempt any of the modes recommended, though I am well cognisant of the frequent success of the plan originally inculcated by Murray of Newcastle, which is simple, and consists in the application of a tourniquet above the tumour, and by its means maintaining firm, steady, and continuous pressure, which tends to coagulate the blood in the sac. Nature afterwards herself aiding by establishing the collateral circulation.

Remarks.—This case presents several points of interest. I am not ashamed to state that in July last, when the patient presented himself for admission, that though the idea of aneurism first passed through my mind, I was more inclined to consider the case as one of a tumour situated over the aorta, the pulsation being communicated from the latter to the former. This simulation and consequent difficulty in differential diagnosis is by no means unfrequent. It was only when the patient was this time re-admitted, and by examining in different positions, that I was enabled to arrive at this diagnosis.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

THREE CASES OF TETANUS TREATED WITH CALABAR BEAN.

(Under the care of Dr. DICKINSON and Mr. POLLOCK.)

SUBJOINED are the notes of the third and last of the series of cases of tetanus lately treated at this hospital with extract of Calabar bean, either by internal administration or subcutaneous injection, or both combined. The first and second cases ended in recovery. That the result in these cases was due to the beneficial influence of the Calabar bean it would be useless to attempt to deny. Both patients were to all appearances rapidly getting worse until the administration of the extract of Calabar bean was begun; from that time they improved, and soon completely recovered. In the third case, although extract of Calabar bean was exhibited in large doses, and the system became distinctly affected by the drug, the patient unfortunately succumbed. The immediate cause of death was not evident, but it is worthy of note that the man seemed to breathe freely, and remained conscious up to the last.

For the following notes, as well as for those of the other cases, we are indebted to Dr. Fenwick, medical registrar, and Mr. Bull, house-surgeon.

CASE 3. *Compound fracture of forearm; dislocation of elbow; tetanus; subcutaneous injection of extract of Calabar bean; death.* In this case the patient was a labourer, aged fifty-five, admitted March 30th, 1876. While at work the man was attempting to raise a ladder, and accidentally slipped, and fell into an area. On admission it was found that he had sustained a compound fracture of (apparently) both bones of the forearm immediately above the wrist, together with a transverse wound about two inches in length on the inner surface of the limb, which freely exposed the muscles. There was also a dislocation of the elbow backwards, both bones being displaced, but the radius retaining its normal relations to the ulna. Ether having been administered, the dislocation was reduced with some difficulty by means of manipulation, the ordinary mode of placing the knee in front of the joint having failed. The arm was placed upon an angular splint. There was no great loss of blood. Six drops of tincture of opium with an effervescing saline were ordered every six hours, and the patient was injected with one-third of a grain of morphia in the evening.

March 31st.—Passed a pretty good night. Complains very much of the pain in the arm. The limb is greatly swollen and tense, and a few bullæ have formed over the hand. The fingers and hand are warm. Ordered ten drops of opium every six hours.

April 2nd.—Is suffering most intense pain in the arm. Slept but very little in the night (the morphia injection having been repeated). The limb is much more swollen, and feels very tense. Fingers and hand are warm. Numerous bullæ have formed. The splint was removed, and the arm placed upon a pillow and wrapped in warm lead lotion; this afforded him much relief. Urine is clear, acid, and free from albumen.

3rd.—The morphia injection was repeated last evening, but he has passed a restless night. Limb seems about the same. A very large bulla has formed on the dorsum, and the hand feels boggy. An incision was made in this situation, and most foul pus mixed with gas evacuated. Being very restless and somewhat delirious towards evening, two-thirds of a grain of morphia was injected.

4th.—Passed a very restless night. Œdema of limb is less. The matter seems to burrow deeply in the hand. The wound was enlarged, and a counter opening made on the back of the arm. A good deal of very foul pus escaped. Towards evening he became very restless and could not keep quiet a minute, attempting now and then to get out of bed, and talking a little to himself. The nurse reported that at 9.30 P.M. he had a kind of spasm and bent his head slightly backwards, but it passed off in one minute. It was now noticed that he was unable to open his mouth sufficiently wide to put out his tongue. There was no apparent rigidity about him. Respiration natural; pulse 90. Bowels act freely daily. Takes his food very well. At 10 P.M. two-thirds of a grain of morphia was injected.

5th.—Passed a most restless night; scarcely slept an hour altogether. The lower jaw is fixed, and he can only just manage to put the tip of his tongue out. Has a very vacant stare. Complains bitterly of pain and want of sleep. There have been no spasms at all, but the muscles of the neck, face, and arms seem to be in a state of tonic contraction, and rather tense. At 1.30 P.M. he was seen by Dr. Dickinson in consultation with Mr. Pollock, and it was decided to treat him with the Calabar bean until fully under its influence.—2.15 P.M.: Injected with one-sixth of a grain of extract of Calabar bean. The pupils just before the injection were semi-dilated. Pulse 96; temperature 99·4°. Had a slight spasm, which lasted about half a minute, and affected chiefly the muscles of the neck. No opisthotonos. Takes without difficulty two ounces of brandy, with half a pint of strong beef-tea and milk, every hour. Abdominal muscles feel a little tense.—

3.15 P.M.: One-sixth of a grain of extract injected. Had two very slight spasms during the last hour, each lasting about half a minute. Pulse 102; pupils smaller.—4.15: Injection repeated. At 3.40 he had a spasm which lasted three minutes; there was no arching of the back, but he seemed to fix his head and press it backwards most firmly on the pillow. Pulse 102; temperature 99·9°. Pupils smaller.—5.15: Injection repeated. Pulse 102. Pupils still smaller, responding to stimulus of light.—6.15: Injection repeated. Pulse and pupils same as at 5.15.—7.15: Injection repeated. Has been more restless during the last hour. Complains very much of want of sleep. Felt very chilly and shivered a little; hot-water bottles to his feet. Pupils small. Pulse 104; temperature 100·4°.—8.15: Injection repeated. Pupils rather larger, still responding to stimulus of light. Pulse 102; temperature 100·4°.—9.45: Injection repeated. Has been very restless during the last half hour, moaning, and constantly crying out for sleep. Takes two ounces of brandy with beef-tea and milk every hour, still swallowing without much trouble. Pupils the same size as at 8.15. Pulse 110, regular; temperature 100°.—10.15: Was seen by Dr. Dickinson and Mr. Pollock. Calabar bean to be increased. Injected with one-third of a grain. Abdominal muscles a little more tense.—11: Injection of one-third of a grain repeated. Continues very restless. No return of the spasms.—11.50: Injection repeated. Perspiring very freely. Pupils medium. Pulse 110; temperature 100·8°.

6th.—12.15 A.M.: Was seen again by Dr. Dickinson. Calabar bean to be increased gradually each injection. Injection of half a grain of extract given.—1.15 P.M.: Injected two-thirds of a grain.—2.15: Injected one grain. Temperature 101·2°.—3.15: Injected one grain and a sixth. Very restless and noisy, screaming out at times with pain and want of sleep. Says he feels "all to pieces." Bowels have acted once.—4.15: Injected one grain and a quarter. Temperature 99°.—5.15: Injected one grain and one-third. Perspiring very freely; has been rather more quiet lately. Bowels acted two or three times. Pupils contracted to size of an ordinary pin's head, and responding to the stimulus of light. Pulse 132, regular.—6.15: Injected one grain and a half. Very restless and noisy during the last half-hour; quieter after the injection. Temperature 102°.—At 6.35 he had a violent spasm, and straightened himself out. There was no opisthotonos. In this state he remained for ten minutes, when he died. The pulse was, during this time, most irregular. Temperature just before death 100°. He seemed to breathe freely up to the last, and was quite conscious.

Autopsy, thirty-three hours after death.—The body was well nourished and in good condition. Heart healthy. Lungs slightly congested, and containing a few minute cretaceous nodules in their apices. Liver was dark-green in colour, soft as from commencing decomposition. The tissue appeared to be healthy. Spleen was softer than natural. The kidneys appeared to be healthy, though rather pale in colour and soft in texture. The brain and spinal cord were somewhat congested, but to the naked eye their appearance seemed to be healthy. They were carefully preserved for microscopical examination. There was a compound comminuted fracture of the left radius, and dislocation of the lower end of the ulna forward. The fracture was situated immediately above the lower articular surface of the radius, being transverse, with a piece of bone chipped off from its anterior surface. The spicula of bone projected downwards and inwards, and rested upon the displaced end of the ulna. The deep tissues around the wrist-joint were infiltrated with pus and serum.

SEAMEN'S HOSPITAL, GREENWICH.

ACUTE HEPATITIS, OCCURRING IN A CASE OF DYSENTERY; IMMEDIATE RELIEF AFFORDED BY PUNCTURE OF THE LIVER.

(Under the care of Dr. RALFE.)

IT is an extremely rare event, in this country, at least, to witness the early or initial stage of the local hepatitis which usually leads to the formation of abscess of the liver. In the present case, however, the interest chiefly rests in the fact that the threatened mischief speedily disappeared after puncture of the liver with an aspirator-trocar, which had been introduced for the purpose of ascertaining whether an abscess had formed. Not only was the pain, which had previously been intense, at once relieved, but the temperature, which had ranged from 99° to 102·2°, declined. From the successful issue of this case Dr. Ralfe hopes that the early employment of puncture in local hepatitis must greatly diminish the chance of the subsequent development of "tropical abscess." As experience has shown that exploratory punctures into the liver-substance are rarely, if ever, followed by bad symptoms, Dr. Ralfe considers this practice might be adopted without exposing the patient to additional risk. The history of the case is taken from notes by Mr. Lacy, the late house-physician at the Seamen's Hospital.

E. M——, aged thirty, was admitted into the Seamen's Hospital June 5th, 1876, suffering from dysentery. He has always been a healthy man. The attack commenced on the 16th of March of the present year. He attributes it to bad river water he drank on the West Coast of Africa. He has had looseness of the bowels ever since. On May 23rd his ship arrived in the Thames, and he went to the Sailor's Home. Here he became worse, and had to be removed to the hospital.

June 6th.—The patient is emaciated, worn, with pinched, anxious expression. The bowels have acted twenty-four times in the last twenty-four hours, the stools chiefly consisting of blood, slime, with a few scybala. Considerable abdominal pain. Temperature: Morning, 100°; evening, 98°. Pulse 108°.

9th.—Thirty stools have been passed during the last twenty-four hours. Complains greatly of pain in the right hypochondrium. Temperature: Morning, 101°; evening, 102·2°. No rigor or sweating.

19th.—Since the last note the urgency of the dysenteric attack has somewhat subsided, ranging from nine to fifteen stools in the twenty-four hours; motions also improved in character. The pain, however, in the right hypochondrium has greatly increased, especially during the last three days. There is also perceptible swelling in this region. The liver dulness is slightly increased upwards in the mammary line, and downwards for two inches below the margin of the ribs. The right rectus muscle is strongly contracted over the region, and here also the most intense pain is complained of on pressure. No distinct rigors have been noticed, nor any perspirations. The patient lies in a very precarious state. It was then determined to make an exploratory puncture to determine the presence of pus. For this purpose Mr. Johnson Smith introduced an aspirator trocar about one inch below the margin of the ribs, just over the tender and prominent region. On turning the valve only a small quantity of blood entered the syringe, but no pus. The man expressed himself instantly relieved by the operation, and the temperature declined.

August 4th.—The patient has had no pain since the operation. The temperature, which two days after the puncture had fallen to 98° F., rose for three days to 99° and 100·2° F. This increase was accompanied with an increase in the number of stools; and as these diminished, the temperature fell again within normal limits. The dysentery continued to be troublesome till the 16th July, when a rapid improvement set in. The patient rapidly gained flesh, and the stools, reduced to two or three daily, were semi-solid, without blood or slime. Examination of the right hypochondrium showed that the liver dulness was completely normal, and no pain was complained of when firm pressure was made over any part of that organ.

THE mortality in London last week was at the rate of 18 per thousand annually. There were registered 1231 deaths, including 50 from small-pox, 11 from measles, 50 from scarlet fever, 6 from diphtheria, 24 from whooping-cough, 15 from different forms of fever, and 99 from diarrhœa. Two deaths during the administration of chloroform occurred during the week—one at Guy's, and the other at St. Thomas's Hospital. In the large public institutions 231 deaths were recorded, or 19 per cent. of the whole mortality; of these 128 occurred in workhouses, 97 in hospitals, and 6 in lunatic asylums. The Fever and Small-pox Hospitals at Homerton and Stockwell contained 248 patients on Saturday last, of whom 105 were under treatment for scarlet fever, and 72 for small-pox.

Reviews and Notices of Books.

Principles of Mental Physiology, with their Applications to the Training and Discipline of the Mind and the Study of its Morbid Conditions. By W. B. CARPENTER, C.B., M.D. Fourth Edition. London: Henry S. King and Co. 1876.

WE called the attention of our readers to the first edition of the above-named work by Dr. Carpenter, from which the present only differs in having a long preface, in which the subject of animal and human automatism is most carefully considered. That doctrine, which has received the support of several eminent physicists and biologists, maintains not only that certain movements of the body are performed automatically, or by virtue of definite mechanical conditions affecting the nerves and muscles respectively, but that even the highest powers of the intellect are exerted only in accordance with laws which, were the whole previous history of the individual ascertained, could be predicated with certainty. According to this view, or, at least, with but little straining of it, we are entirely the creatures of circumstances. There is no such thing as free will; choice is impossible; and the highest efforts, moral or otherwise, of which man is capable, are but the result of the antecedent conditions to which he has been exposed. There can be no doubt that, unsatisfactory as are the logical conclusions of this theory, it has a basis of truth, which is recognised in such common phrases as "The child is the father of the man," and "Train up a child in the way he should go." It is the surroundings, the conditions under which a man is brought up, that make one man a Christian, another a Buddhist, and a third a Mahommedan, and which leads one nation to view with abhorrence what another may view with complacency or regard as commendable. It is admitted on all hands, again, that many of the actions of the lower animals are purely automatic, whilst we see in the cry of pain or the act of sucking in the human infant, that definite and even very complicated movements can be performed without the co-operation or exertion of the will.

Nevertheless, however this theory may be in accordance with certain well-known facts, it is in the work before us very warmly opposed by Dr. Carpenter, who takes exception to it on various grounds. He first notices an argument recently advanced by one of its supporters, Prof. Clifford. Prof. Clifford recently remarked that, as the only thing which can possibly be conceived to influence matter is either the position or the motion of surrounding matter, the statement "that the will influences matter" is simply "nonsense." Dr. Carpenter replies that in making this affirmation Prof. Clifford assumes that he knows all about matter and its dynamical relations, and therefore has an unquestionable right to say that mankind at large are wrong in the conviction that the movements of their bodies are in any way directed by their minds. Secondly, Dr. Carpenter adduces the direct testimony of consciousness as demonstrating the existence of a volitional power, by which a selection between opposing influences can be made, such selection being due to the self-determining power of the will, so that of two motives of unequal strength the weaker can be made the operative one by a voluntary effort. "If it be urged," he goes on to say, "by the automatist that this fixation of the *ego's* attention on one set of motives to the exclusion of the other is really due to the superior strength of the motive (supplied by his previously formed character) which leads him to desire so to fix it, I reply that no experience of which I am conscious is more real to me than that if I did not *make an effort* to keep my attention fixed the *desire* alone would fail to do it. I am further conscious that a great deal more is 'taken out of me' (to use an expressive colloquialism) by the prolongation of such a struggle than by a far larger measure of undistracted mental action. And I ask why, on the automatist's theory, should this be? To myself it seems clear that it is in the control he thus acquires over the automatism of his nature that man's *freedom of choice* essentially consists; whilst, on the other hand, it is in virtue of his want of power to gain a complete control that his *freedom is limited*."

The question of course remains—how far this "sense of effort" in the direction of thought, with its attendant exhaustion, is to be held as a proof of the existence of a conscious will. It might possibly be regarded as the result of the action of opposing forces acting alternately on the same nerve-centres. Thus a man sees and has the opportunity of secreting and carrying off undiscovered an object he has long desired. The savage has no hesitation about it; the present stimulus of the object is the strongest motive to his will, and he has no fear of the consequences. But the (morally) educated man, though he may have the like desire, dreads the results, or even the possibility of detection and exposure, and resists the temptation. And if the sense of effort alluded to by Dr. Carpenter were really felt, it might be regarded as being due merely to the alternate action of the opposite motives. As the moral education of the individual progresses, the motives for theft become so feeble, whilst the motives against it become so strong and so habitually acted on, that it costs the mind no effort to abstain from yielding to the desire. Dr. Carpenter holds that the direct testimony of consciousness as to any one of its primal cognitions must be held of higher account than the deductions of reason from data afforded by other cognitions, and proceeds to discuss Professor Clifford's and Professor Huxley's views in regard to voluntary movement being only a "symbol in consciousness" of some immediately prior state of the brain, and not an effect capable of being produced by an original or primary effort of the will itself. The whole chapter is of great interest from a metaphysical point of view, and deserves careful study. The rest of the work does not appear to have undergone any alteration.

The Principal Health-Resorts of Europe and Africa for the Treatment of Chronic Diseases. By THOMAS M. MADDEN, M.D., M.R.I.A., Vice-President of the Dublin Obstetrical Society, &c. London: J. and A. Churchill. 1876.

THE author very properly commences his preface by the assertion that "change of climate and mineral waters are each year more largely employed in the treatment of nearly every form of chronic disease." The book before us is the result of many years' travel and residence in and about most of the favourite and fashionable health-resorts in Europe and Africa, including Cadiz, Seville, and Gibraltar, Malaga, Lisbon, Madeira, Egypt, Hyères and Cannes, &c. The second part of the book is devoted to a general review of the various spas of Europe. The book is interesting as a "sketchy" production, and contains a great deal of useful information, but we doubt very much if it will fulfil the ostensible object of the writer, to act as a practical guide to the "pilgrim in pursuit of health." Such a guide is undoubtedly wanted in the present day, when far too little care is taken by even distinguished physicians in recommending climatic changes to their clients.

A WARNING TO PUBLIC VACCINATORS.—A case of considerable importance to public vaccinators was tried recently at the Wimborne Petty Sessions. Mr. S. F. Underhay, surgeon of Gussage All Saints, was summoned for failing, as a public vaccinator, to transmit certificates of successful vaccination of four children. After evidence had been given in support of the summons, the defendant, who did not appear, was fined ten shillings and costs.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 16, 1876.

A NOVICIATE to test the verity of a supposed "vocation" for the profession of Medicine is much needed. We will not add that a term of probation might also be useful in the case of young men who, without any inclination of their own, are destined for the career of physicians, surgeons, or general practitioners, because the folly of forcing youths into a line of occupation, which is also an enterprise—with no better excuse than convenience, arising out of the fact that their fathers or near friends are perhaps successfully engaged in it,—is so apparent, that those who commit it deserve the disappointment that commonly ensues. The Church has been desecrated by the ministry of men having no conscious "call," or fitness for a religious life and holy offices. The Army has been found lacking in discipline, if it has not suffered some loss of prestige, when tainted by the presence in its higher ranks of those who do not, to use a phrase of RUSKIN'S, "love war *for its own sake*," or possess a natural talent for military leadership and prowess in the field. The crowd of briefless barristers appropriately illustrates the consequences of assuming the forensic character and privileges without first ascertaining the existence of forensic powers and tastes.

No one of these examples of error and its results can adequately set forth the personal discomfiture and social injury wrought by the introduction of men without solid qualifications or special aptitude for medical study and work into the profession of Medicine. Not only do these ill-provided and unfit persons fail as students or practitioners, discovering their disability when it is too late to abandon a pursuit in which genuine success is impossible without devotion and interest; they drag out listless lives of regret and weariness, doing work badly, by which the sick suffer and the progress of science is impeded instead of advanced. The error against which it is our wish to raise a warning voice is no imaginary evil; the proofs of its reality are too many and too mischievous to leave room for doubt. The time has come to speak out plainly and earnestly, and there could be no more fitting opportunity than that offered by the near approach of the season when youths impelled by rational predilections—with not a few, it is to be feared, influenced by the wishes of others, and considerations neither far-sighted nor reasonable—enter upon their curriculum. The subject is one of stern and even painful interest. What we have to urge shall be stated briefly and in all frankness.

It is generally felt to be impossible to make a man an artist, a poet, or a philosopher, unless he is gifted by nature with special faculties for the work in which he will be required to engage. The failure to recognise that it is not less impracticable to convert a youth with no particular proclivities towards science into a scientific practitioner springs from non-recognition of the fact that Medicine is an art-science applied to practical purposes, and calls for special acumen, with what, for want of a better term, we sometimes term genius, to fit the practitioner for useful and successful work. The popular, we fear too often also the professional, view of our art is mistaken, and betrays the interests of truth and humanity. The prescription of conventional remedies for maladies recognised by traditional formulæ of perverted functions and abnormal appearances is not *Medicine*. A man may learn to perceive these so-called symptoms by rote, and acquire some expertness in the routine business of "exhibiting" the appropriate remedies; but this is not scientific practice. "Physicians" possessing a good memory and fair skill in this department of industry are not unfrequently credited with a sound knowledge of their craft, and described as good at diagnosis and treatment: they command confidence, and achieve financial success. Surgeons having a matter-of-fact acquaintance with anatomy, and some dexterity in the use of instruments and mechanical appliances, are accounted skilful. Nevertheless, science gains nothing from such practitioners, and the service they render society is of no higher value than that performed by the thousand and one experts in industries which require nothing more than *experience* for their pursuit.

It is not to be denied that men of average general ability, supposing they can be induced to struggle valiantly with the difficulty of mastering the necessary details of a subject so vast and complicated as "Medicine," may be rewarded with the measure of success we have indicated, and it is probable that many respectable parents and guardians will be content with such results. Nevertheless the achievement is not a sufficient recompense for all the trouble and expense it involves. The prizes within reach of the medical profession are not rich, and they fall to the lot of few. An equal amount of labour expended in almost any other department of energy will secure a better return. Looking to the simply worldly rewards of medical industry it is strange that any well-meaning counsellor should instigate a youth with no particular ambition to distinguish himself in the applied science of physic, to choose the profession of Medicine as a career. It cannot be an agreeable occupation to those who discern nothing beyond the daily duties of the physician and surgeon, and it will probably prove so distasteful to the uninspired practitioner as to destroy his chances of even average success. We would go a step further, and assert that it is inconceivable how any practitioner knowing the sorrows, the discomfort, the self-sacrifice to be endured by a medical man in the exercise of his calling, can wilfully entail these disadvantages on a son or a ward who has not exhibited the strongest and most palpable evidences of a distinct "vocation." Young men *forced* into the profession are a misery to themselves, and the cause of misery in others. It is impossible to put the case too strongly, and we would ask those upon whom devolves the responsibility of advising or permitting an unwilling or apathetic choice of the profession to look once more around, and at the prospects before them, before it is too late to avoid a false step which may land the victim of mistake or unwise influences in life-long discomfiture.

There is reason to fear that medical men with limited means and large families sometimes bring their sons up to the pro-

fession as fathers with "a 'living' in the family" devote a son to the Church. It does not occur to parents so acting that much more than the decorous discharge of a simple routine duty is indispensable to even a tolerable livelihood by the craft of the "doctor." Each year makes the financial success of a routine practitioner in medicine more improbable, and it is the hope and aim of genuine professors of the science and art of physic and surgery to render this low form of success speedily unattainable. If the earnest and ceaseless efforts of scientists of all classes are even moderately effectual, the possibility of any large measure of satisfaction in this class of practice will be extinguished before young men entering at the approaching session have completed their curriculum. It is not alone that the examination tests are being augmented in severity, a new mode, of higher intelligence and more exacting, is beginning to replace the old method of practice in all its grades and branches. Memory will no longer, when this reform is accomplished, do duty for an acute and skilled faculty of judgment, of resource, of scientific research, and philosophic originality. A man without special qualities for this supreme form of intellectual industry can have no rational prospect of success in an enlarged field of enterprise so prosecuted. It would be a fatuous error to measure the effort required to succeed under the new circumstances by the conditions of the old struggle and competition. A man might pass muster to-day who will be instantly worsted in the battle of life ten years hence. It must be the acme of short-sightedness not to look this fact fully in the face with all its consequences.

We have no wish to multiply difficulties, but the selection of a permanent career is so important, that it becomes a duty to suggest every consideration which may serve to inculcate the grave and urgent need of caution. Let the friends and advisers of youths about to enter the state of medical pupilage fully recognise the responsibility they are about to thrust upon them. Unfortunately there is no "noviciate" and seldom an opportunity of retreat after the choice of a profession, and that to which these young men are devoting themselves is of necessity so exclusive—so fenced round with preliminary branches of study and shut out from view—that possibly not one man in a score clearly understands the future to which he is committing himself until some of the best years of his life have been spent in preparation for its practical duties, and in ignorance of its cares, its obligations, and its ever-increasing and heightening responsibilities. It is not only because Medicine cannot be advanced by unambitious and unskilled professors we thus speak, but men entering the profession without enthusiasm and a constraining love of enterprise in science cannot succeed; and their failure brings discredit on our craft, bitter disappointment to minds crippled by a first mistake, while lives are blighted which might have been happy and useful if the beginners had been better advised.

THE inaugural address of the President of the British Association this year was, as became the character and work of Professor ANDREWS, in an eminent degree practical. His survey of the field of research is masterly and instructive; his observations on the relations of pure and applied science are suggestive and useful; his views of the duty and opportunity awaiting the universities with respect to practical scientific training are clear, and deserve the careful consideration of those with whom it rests to make the historic seats of learning in a new sense centres of intellectual energy. It is not, however, with these matters, important as they undoubtedly must be held, that we are at this moment concerned. Professor ANDREWS in the course of his speech made two observations, which, taken together, involve a truth of high value and opportune significance. He spoke of the ability and activity with which a special branch of science was cultivated as possibly weakened by the demand on the part of the public for professional aid. This is as true of most other departments of scientific research and industry as of chemistry, to which the remark primarily applied. It is peculiarly appropriate to the specialty of science in which we are professionally interested.

The practice of Medicine is, in a certain sense, a drag on the progress of Medical Science. The statement will be challenged by many who are most usefully engaged in the exercise of the applied science. Clinical medicine is of such cardinal importance that those actively concerned in its pursuit are occasionally disposed to forget the close and dependent relation in which all research and experiment carried out at the bedside—to be scientific—must stand connected with the formulated knowledge and principles of Medicine considered as a pure science. It may seem a startling assertion to make, and it is avowedly one we expect to find criticised, that the tendency of recent thought is to give undue prominence to clinical work, and treat scientific medicine with unmerited neglect.

This is scarcely wonderful, seeing that to the majority of busy practitioners the methods and processes of pure science are scarcely familiar, while the habit of study from *cases* is daily and hourly strengthened. Nevertheless, the claims of science cannot with impunity be disregarded. "Clinical medicine" alone may render a man expert in practice, but it can never make him a physician in the true signification of the term. It will be retorted that the most successful physicians are also the best clinicists. The assertion need not be disputed, but the fact remains that expertness in the recognition of set formulæ of symptoms and the ready application of approved remedies is not science, though it may be valued and commended as the development of a form of art. Comparison with the higher functions of Medicine will bring to light the same kind of difference that exists between the mere power to work a telegraph, and a profound knowledge of electricity, with its powers and modes of conduct under diverse conditions and in connexion with divers forms of apparatus. The next practical objection which will be urged is that the lessons physicians chiefly require to learn are taught by experiment in the course of morbid action. This also is true, but the truths illustrated and enforced in the laboratory of disease cannot be read off, so to speak, from the morbid phenomena with accuracy or confidence, unless corrected by scientific comparison with the phenomena of health. In a word, Clinical Medicine takes no constant note of the behaviour of the organism in health, but is wholly engrossed with its manifestations under the disturbing conditions of disease. Medicine, properly so called, comprehends both. Our plea is for the fuller recognition of an

architectonic method of study not only in the schools but in daily practice.

We think the warning given by Professor ANDREWS in connexion with progress in chemical science is well worthy the attention of thoughtful men in relation to that wider sphere which includes the chemical and nearly every other branch of natural science, and makes them all its own. The exigencies of busy life have a strong and, as we believe, injurious tendency to absorb the entire energy of practitioners and to leave little time, strength, or desire to pursue the science of medicine for its own sake. Under this pressure men naturally desire to glean the hints they need for daily guidance, with the least labour. Principles are forgotten in the haste of practice; the science is neglected in the cultivation of the art. The pressure which produces these general results is peculiarly strong in its bearing on famous and fashionable practitioners, and it happens that men who have won their way to the highest rank in the profession and gained its respect and confidence by great services, are suddenly shelved as workers, by their success. It is against this evil, looking at the matter from the standpoint of science, we think the profession should guard.

The second passage of the address which seems to claim special notice is that which insists on the importance of attaching increased value to originality. "If," says Professor ANDREWS, "the universities, in accordance with the spirit of their statutes, or at least of ancient usage, would demand from the candidates for some of the higher degrees proof of original power of investigation, they would give an important stimulus to the cultivation of science." This is a sagacious thought, and the proof that it may be cast in a practical shape is supplied by the fact that the system to which it points is to some extent in operation at certain Continental universities, and with the best results. It must not be supposed that there is no scope for originality in Medicine. A certain spurious variety of this quality has, indeed, been foisted upon the profession from time to time, and done much to discredit real progress. There is a peculiar temptation to vaunt "discoveries" in physic. The demand for novelty is always present and ever great. The rewards lavished on the originators of new systems and modes of treatment are considerable. It is not to this form of originality, the genius of the charlatan, we allude.

Originality which takes the form of discovery of some marketable commodity, whether it be a "system" or a "specific," is properly regarded with distrust by the profession, and we hope it always will be so. A really good idea can wait; a bad one promulgated for gain or the purchase of a little cheap notoriety is most suitably treated with contempt. There is, however, plenty of scope for genuine enterprise in each of the several provinces of Medicine, and research ought to be encouraged and stimulated by every means at our disposal. The students and practitioners of this great science should be convinced that not only is the present stock of knowledge insufficient, and are its details defective, but there is a wide field waiting for the gleaners, and the time to garner is slipping away. It is impossible to look—as carefully as any single mind is competent to look—over the area of the medical sciences, and not to feel that it is inadequately worked, and the workers are woefully listless, preoccupied, or inexpert. It is well now and then to be reminded of the actual state of affairs, and we thank Professor ANDREWS for a hint which the most sagacious amongst us will not be slow to take.

The Duke of ARGYLL, at the close of this address, which, if it erred at all, erred on the side of utilitarianism, did wisely to insist that the pursuit of science must be "for its own sake." Without that "love of knowledge" which is the only sufficient incentive to progress, there can be little energy and no adequate force. Meanwhile it is a duty to foster the strength of loyal enterprise, and by stamping originality with the highest hall-mark zeal may be stimulated and directed into useful channels.

ABOUT three years ago Dr. WICKHAM LEGG published in the St. Bartholomew's Hospital Reports a series of experiments undertaken with a view to demonstrate the effects upon the liver itself of ligature of the common bile-duct. It was a field which had not been much worked upon, and Dr. LEGG's numerous experiments were a valuable contribution to pathology. In the present year the same question has been studied jointly by MM. CHARCOT and GAMBAULT, the former having chosen the pathological anatomy of the liver as the subject of his lectures during the past session. These observers contribute the results of their labours to the current number of the *Archives de Physiologie* in a paper of much interest. Referring to Dr. LEGG's observations, they state that they had pursued the same subject in order to push the conclusions further than he did. Their paper is founded on the examination of the livers of guinea-pigs, in whom they tied the common duct. Seven animals were taken, and they either died or were killed at different intervals after the ligature—viz., five at periods varying from the fifth to the twelfth day, one was killed on the tenth, and one survived until the twenty-third day. In the main their observations tally with those obtained by Dr. LEGG, the differences that appear between the two sets of experiments being probably in great part due to the different kind of animal—viz., the cat—upon which Dr. LEGG operated, and the length of time which elapsed between the operation and death. One striking difference was that in their experiments, even in the case of the animal which lived twenty-three days, there was never any trace of jaundice, nor any appearance of bile in the urine, although the duct had been completely occluded.

After describing the steps of the operative measures, they proceed to discuss the appearances presented by the liver and its appendages after death. In all cases the organ was enlarged and indurated, of a pale-yellow colour, and sometimes of a nutmeg appearance; the gall-bladder and the hepatic and cystic ducts were distended with bile mixed with mucus, and there was inflammatory induration in the hilus of the liver and some local peritonitis at the seat of operation. During life the creatures showed simply wasting and loss of appetite, and in some instances they even rallied from this, and had to be killed for the purpose of examination. In no case was the liver granular, as in some of the instances observed by Dr. LEGG, but this is believed by the authors to be due to the greater length of time which those animals survived in which the granulation was present. Microscopical examination showed dilatation of the bile-

ducts in the portal canals to ten or fifteen times their normal diameter, and, in spite of this, the epithelial lining of the ducts was preserved, giving evidence of considerable proliferation of this epithelium. Sometimes the ducts were filled with bile, in other places they were empty. The spaces and fissures between the lobules were much enlarged, and there was marked evidence of perilobular sclerosis, in the presence of an infiltration of small cells encroaching on the lobules on all sides. In the midst of this new tissue the sections showed a very large number of ducts and small anastomosing channels, in part due possibly to a varicose condition of the ducts, leading to their being cut in different directions, so that the same section brought into view several portions of the same duct; and in part also due to the dilated bile-capillaries in the outer parts of the lobule being rendered evident by the disappearance of the cells between which they normally run. The amount of these changes was proportionate to the length of time that elapsed between the ligature and the examination, but even in the shortest intervals some sclerosis was present, showing that the process must be of very rapid evolution. As to the lobules themselves, they were more or less irregular in outline and diminished in size, but it was evident that the change produced was due simply to the gradual disappearance of the outermost cells in the lobule, for the portions of each lobule that remained still preserved the radial arrangement of their cell columns, and their constituent cells were still intact. Here and there an atrophied cell could be observed in the midst of the newly-encroaching connective tissue. Fatty degeneration of the cells was only exceptionally observed; they seemed to disappear by a process of simple atrophy, and in some instances to undergo a kind of vitreous change of their protoplasm, the nucleus of the cell remaining. In all the livers examined the leucocytes between the lobules were here and there grouped into small masses, evidently commencing abscesses.

MM. CHARCOT and GAMBAULT differ from Dr. LEGG with regard to the pathogeny of this state of liver. Whereas he believes that the sclerosis is a primary condition, the result of an inflammatory process, having its starting-point in the irritation set up by the ligature around the duct, the present authors, on the other hand, hold that this indurative change in the hepatic parenchyma depends upon the fact of bile retention; not simply to the rapid dilatation of the ducts but probably also to some change that takes place in the retained fluid itself. In one of their experiments a number of vibriones were found in the cystic bile immediately after death. The retained bile acts first upon the mucous membrane of the ducts, producing the proliferation of epithelium above mentioned. The irritative process then involves the other coats of the ducts, the tissue composing Glisson's capsule, and the thin connective bands that separate lobule from lobule. As a result of this irritation, there is more or less accumulation of inflammatory growth around the lobules, encroaching on them at their margins, and causing the gradual disappearance of the cellular structure. It is a true sclerosis, and a similar (although perhaps not quite the same in its anatomical origin and distribution) effect follows ligature of the portal vein. The authors promise a further paper upon the varieties of hepatic sclerosis.

In the human subject an indurated liver has frequently been noted in cases of obstructive jaundice, and the authors show, from a minute examination of a case recently under the care of M. CHARCOT, that these indurative changes are precisely similar in kind to those met with in the guinea-pig in whom the common bile-duct has been ligatured. They believe, moreover, that the "biliary abscesses" which are sometimes found in these cases arise in precisely the same way as the sclerosis—that is, that they are formed outside, and not within the dilated and blocked bile-ducts.

LATELY it has looked very much as if we should have to have a Workhouse Pharmacopœia. Boards of guardians have been sitting in judgment on the therapeutical uses of alcohol, and in some cases have gone the length of passing a resolution to stop the allowance of alcoholic stimulants to sick inmates of the workhouse hospital. The guardians have just as much right to sit in judgment on the therapeutic uses of quinine or cod-liver oil or opium. Such a course would appear more presumptuous, but in reality it would not be more unreasonable. The action of alcohol and its uses in sickness are two of the most important and difficult questions in physiology and therapeutics, about which a man like PARKES, who had laboured earnestly and long to arrive at the truth, would speak with great modesty and moderation. But, forsooth, some boards of guardians think themselves entitled simply to resolve that the administration of alcohol to the inmates of workhouses under their care shall cease. The estate of pauperism may be a most discreditable one. It may imply a very low condition of the morals, and therefore of the merits, of the pauper. But it also consists with, and is, in fact, not unfrequently occasioned by, a low condition of the physical system, which is productive of all sorts of intractable or fatal forms of disease. A medical officer of a workhouse may prescribe in such states anything within the bounds of the British Pharmacopœia—as, for example, *mistura vini gallici*, or a glass of *vinum xericum*, both articles of the materia medica so important as in the judgment of the Medical Council, to which Parliament has entrusted the preparation of a Pharmacopœia, to be entitled to a place in the Pharmacopœia. As we have said, some boards of guardians have gone the length of passing a resolution which involves that such prescription of brandy or sherry on the part of their medical officer shall not be honoured. They have been warned by the Local Government Board that they incur a serious responsibility if they act contrary to the opinion of their medical officer as to the treatment of cases of sickness. Independent of the right of a qualified medical man to order anything he sees fit within the bounds of the Pharmacopœia, the Orders of the Poor-law Commissioners proceed upon the supposition that the medical officer has the power to prescribe wine, spirits, porter, and beer, as he has the power to prescribe sugar, butter, or arrowroot. It is well therefore for medical officers of workhouses to know that guardians, in passing such absurd resolutions as those which prohibit the therapeutic use of alcohol or beer, entirely exceed their powers. It is greatly to be lamented that any medical officer should seem to recognise the right of guardians to control him in

this matter. He should, indeed, be controlled, but only by a sense of his own responsibility. It is very gratifying to see that a board which had so far forgotten the limitation of its powers as to pass such a resolution as we have referred to has had the sense to rescind the same. When a public body puts itself into what is a false position, and may become almost a criminal one—for a charge of manslaughter might easily arise out of it—it shows its wisdom by losing no time in abandoning it. Such has been the behaviour of the Bridgwater guardians, who, by a majority of fourteen votes, on the motion of Captain HICKLEY, J.P., have rescinded a resolution, passed about a month before, to stop the allowance of alcoholic stimulants to the sick inmates of the workhouse hospital.

The Workhouse Pharmacopœia, which threatens to be wanted if the guardians persist in dictating the remedies which are to be prohibited, will be remarkable for the absence not only of alcohol but of chloroform. A correspondent's letter to-day shows that the Poor-law system does not contemplate that paupers should have the luxury of chloroform administered safely—that is, specially provided in a case of operation for that purpose. Our correspondent had to perform an operation in the workhouse for which chloroform was necessary. He had to employ a friend to give it, whom he paid. The guardians refused to reimburse him for the same, and did this even in a discourteous way. The Consolidated Orders are here at fault, not providing for the administration of chloroform; but the guardians might at least have expressed their regret, and granted a maximum fee that would have allowed the surgeon to pay the chloroformist. The discouragement of pauperism is not to be effected by removing alcohol and chloroform from the Workhouse Pharmacopœia.

Annotations.

"Ne quid nimis."

THE NATIONAL IMPULSE.

SYMPATHY with suffering is one of the simplest and commonest qualities of human kindness. Where it is not found expressing itself in words or deeds, unless over-mastered by some dominant emotion, human nature, except in one of its lowest and most imperfect forms, cannot exist. Men may become monsters under the influence of brutish passions, but for the moment they sink in the scale of development, and are wholly animal. This degradation of mind, which unmans the intellect and leaves it a prey to instinct, is something widely different from "possession" by fanaticism, superstition, or that false religious sentiment which disciples of the loftiest Faith occasionally share with zealots of the most debased idolatrous delusions. In this last form of mental depravement the individuality, with all its feelings, impulses, and sentiments, those cultivated characteristics which make up the "better nature," is enslaved. The man acts, and, for the time, thinks and feels, under the control of a power outside himself. When this external influence is centred in a hierarchy of priests or the oracular authority of a superstition, it takes the shape of religious enthusiasm, and at its bidding individual men will cherish thoughts and do deeds alien to their proper nature. Moved by a power so overwhelming, men of tender feelings, with loving hearts and warm sympathies, have committed acts of hard, cruel, and cold-blooded atrocity. Persecution is unhappily the vice of no special form of bigotry, but the bane of all varieties of belief indifferently, in which reason is surrendered and faith degenerates into credulity. The converse of this demoralised and demoralising slavery of the personal mind and will is that stirring and, under certain conditions, elevating influence which spreads from heart to heart, as by some form of human magnetism, when a vast multitude of people is moved by a common impulse and responds to a single stimulus—as the mind of one man. There is surpassing grandeur in this national emotion when it takes the form of sympathy and is stirred by an irresistible impulse to relieve suffering or avenge its wanton infliction. There is no doubt this sentiment may be simulated, and it is, in fact, occasionally counterfeited by the machinations of crafty agitators; but there is no room to question the spontaneity of the emotion which now fires the heart of England with sympathy for the victims of Turkish—perhaps we ought to say Moslem—barbarity in Bulgaria. The hideous cruelty, the brutish, almost fiendish, atrocity of the raid made on the Christian subjects of the Porte by its myrmidons in the internecine war with Servia and the allied provinces, has lacerated the feelings of humanity in this country; and we would fain hope the hearts of other civilised peoples, though not so demonstrative, are not unmoved. The greatest and best among us have felt most acutely, and where the responsibilities of office or statesmanship have not compelled self-restraint, the expressions of emotion, the denunciations of wrong, the burning invocation of justice upon the heads of those who have done this wrong, have been well-nigh uncontrollable. It was to be expected that the ex-Premier, a great and good man, gifted with the highest sensibility, and animated by the keenest sense of injustice, oppression, or tyranny, would be in the van of any noble national movement. We will not pause to inquire whether, in the full enjoyment of that conscious liberty which every statesman, however practised—and the more earnest, with the greater enthusiasm,—must experience after a long term of enforced restraint, Mr. Gladstone may have written and spoken with greater *verve* than the situation required or perhaps justified. His pamphlet and his speech, the latter perhaps an octave below the former in pitch, but not less melodious with humane and noble sentiment, will live in the memory of England and the world, commanding the admiration of men of all parties and every creed. With the political question involved in this terrible episode we have no direct concern, but with the national impulse, the emotion that stirs all hearts, a profession whose high vocation it is to relieve suffering everywhere, however inflicted, must feel the deepest sympathy. The outrages committed by the Turk in the name of Moslemism are so horrible that nothing short of extreme justice meted out to those who have disgraced our common manhood by deeds so dastardly can appease the indignation in which all participate. This must be the first concern of any Government which claims to execute the will of the nation. To prevent the repetition of a scandal so great and brutalities so revolting must be the object sought hand in hand with justice. It is impossible to believe the Ministry are not alive to the duty imposed on them. Public confidence is to some extent restored by Lord Derby's declaration, and the hope of speedy action is encouraged by the news that already the Porte has ordered the arrest of its agents. It remains to see whether the Government of Turkey can be acquitted of any complicity with the wrongs inflicted by the chosen servants of the Sultan. Upon that issue everything as regards the future of the Porte and its sovereignty ought to depend.

DR. BUCKNILL'S REJOINDER.

DR. BUCKNILL is of opinion "that those who play at bowls must put up with rubbers." That is true; but if, in the course of this old English game, a player were to catch up an armful of the heaviest bowls, and, rushing out of the alley, proceed to pelt his opponents with these missiles in the open streets, it might possibly be objected that the procedure involved a wide departure from the old English fashion. Having given Dr. Bucknill the fullest scope for exercising his function as self-appointed champion of American "psychologists" in the columns of THE LANCET, we could scarcely bring ourselves to believe that he had really allowed his zeal to get the better of his discretion so far as to attack us in the course of an oration delivered before a meeting of the "Medico-Psychological Association." We do not complain, but the circumstance is to be regretted, and, we think, will be deplored by no one more than Dr. Bucknill, remembering the published and unpublished opinions expressed by him in connexion with this controversy. If, as we believe, Dr. Bucknill feels strongly that the American treatment of lunacy is not satisfactory; if he means what he says in the remark "that the use of restraint must always be an abuse whenever and wherever it can be avoided"; and if he considers the recourse to restraint in the asylums of the United States might generally be avoided, he must be perfectly well aware that nothing we have said against the restraint system as practised in America is in excess of the requirements. As a matter of fact, Dr. Bucknill agrees with us, and he has expressed his willingness to say so. Why then this wild and, we must add, inaccurate rejoinder to our criticism, delivered in another place, and outside the lists he asked and received permission to enter? When Dr. Bucknill replies to the few simple questions we now propose for his consideration, perhaps he will explain what at present certainly appears inexplicable. Our first question is, whether Dr. Bucknill seriously asks the profession to believe that the official documents from which some of our most grave extracts were made are, as he asserts, compiled from information "stolen or betrayed"? We laid no stress on any particular quotations made from American sources, and we abstained from comment. It is to Dr. Bucknill American superintendents owe the reproduction of these proofs that our remonstrance was needed. It would have been more consonant with our own feelings in the matter to allow what was recognised on both sides the Atlantic to be understood rather than formally expressed. No one knows better than Dr. Bucknill, no one has more strongly and explicitly affirmed, that the treatment of the insane in America is defective, and from a humane point of view discreditable. We neither said nor implied that there were no good and well-managed asylums in the United States. The assertion that we have condemned American superintendents or their establishments indiscriminately is erroneous and indefensible. Our next question is why, if Dr. Bucknill really thinks it would have been impertinent, or even unreasonable, "to ask for the register of injuries and accidents," as he seems to have declared with emphasis before the Medico-Psychological Association, he expressed his "regret" in our columns that it did not occur to him to do this very thing? The following passage in Dr. Bucknill's article of June 24th last will place the matter in a light somewhat different from that in which he has since exhibited it:—

"I found myself in a bewildering tumult of noisy and excited women, many of whom were restrained in straitwaistcoats. I observed, however, that this free use of restraint had not been altogether efficacious in preventing such conflict as leaves behind the tell-tale marks of black eyes and bruised faces. *I regret that it did not occur to me to ask in this or in any other American asylum to be permitted to inspect the register of injuries and accidents*; but if such a record be kept, I think it more than probable that a faithful comparison of it with that which the law imposes on our own institutions would clearly prove that non-restraint does not encourage, nor restraint diminish or prevent, the occurrence of injuries from violence."

The inconsistency is flagrant. The only other question we will put is, whether Dr. Bucknill actually supposed the remarks we made *à propos* his omission to ask any question when he saw eight patients at Dr. Nichols's establishment in the restraint of strait-waistcoats—two or three attached to the back of a bench, and not one of them suffering from excitement, were intended to "censure" his use of the words, "It must have been imposed because it was thought the best mode of treatment"? Was not Dr. Bucknill aware that the exception we took was to his neglect to ask the reason of this strange treatment? The sentence standing in his article of June 3rd last runs, "I confess that I did not ask for any explanation of this use of restraint." Our rejoinder was and is, that, visiting an asylum with a view to report on it, or reporting on it afterwards with a view to influence the judgment of the profession in this country, Dr. Bucknill ought to have done what he confesses he left undone. We believe our readers will agree with us. It is with regret we point out these anomalous features in the speech. We can easily understand that Dr. Bucknill may regret the direct action we have taken in this matter—possibly that we have taken action at all; but this feeling will not excuse misconstructions so marked as those we have noticed, or clumsy pleasantries so absurd as that in which we are supposed to be ignorant that the practice of slave-holding has not been universal in the United States, or, to have stigmatised the alienists of America as "mad-doctors" in reproach, and condemned the whole body of psychologists across the Atlantic for faults in which they do not all participate. This is not the way to advance the cause and progress of science; and it is as opposed to the canons of common-sense as it must be inconsistent with the dictates of Dr. Bucknill's own better judgment and calm wish.

REGISTRATION OF DISEASE.

DR. WALTER DICKSON, R.N., Medical Inspector of Her Majesty's Customs, has usefully employed his extensive experience in statistics of sickness, by showing, for the benefit especially of friendly societies, the mean daily number of men incapacitated in his own department, the time lost per man in a year, the invaliding rate, and the mortality rate. A comparison of these figures with analogous statistics from the army and navy returns of men on the home stations, shows that the invaliding rate of the Customs is much less than either. But the mortality rate is higher, because the average age of men employed in the service of the Customs is much greater than that of army and navy men, and also, as Dr. Dickson says, "because most cases of chronic disease likely to terminate fatally are invalided at an early period out of the military services." But, on the other hand, "the invaliding rate in them (i. e., the army and navy) is proportionally very high, many having been entered as growing lads before their physical defects and incapacity can be discovered." The author of the letters from which we quote (as they appeared recently in *The Times*) has incidentally opened out once and again a subject to which we have continually recurred—namely, the systematic registration of disease. Dr. Dickson has done good service in showing the practical as well as the scientific bearings of this important question, and it is much to be regretted that no similar statistics are forthcoming from the Post-office—a Government department that employs more men than any other

Imperial establishment in London—or from the Metropolitan and City Police offices. It is notorious that the existence of so-called friendly societies is brief (and not always brilliant) because their managers, in common with most other persons, whether men of business and statists or not, know next to nothing about statistics of sickness. Quoting again Dr. Dickson's numbers and observations, "Rheumatism and gout in their various forms cause 14 per cent. of the whole time lost through sickness, and 32 per cent. of the whole amount of invaliding or premature superannuation, but little or no mortality." But "zymotic diseases, which play so important a part in the Registrar-General's returns, and are so fatal to the youth of the community, are comparatively insignificant in their operation in the adult male population." Dr. Dickson is quite right in indicating that the benefit societies might, if they would, furnish for themselves—and for others also—valuable statistical information. But, as we have frequently remarked, a system for the registration of disease is one of the necessary items of a sanitary machinery, and so should be organised and set in motion by the sanitary department of the Government. As long, however, as this department, represented by the Local Government Board, persists in ignoring the necessity for scientific work radiating systematically from the centre to the circumference, we are not likely to have diseases registered, and by this means mortality minimised; unless, indeed, the work can be referred for execution to the Somerset House authorities, who so well fulfil their duties in the matter of births, marriages, and deaths.

THE DRAINAGE OF CAMBRIDGE.

AT a meeting of the Cambridge Improvement Commissioners, held on Tuesday, Sept. 5th, a communication from the Phosphate Sewage Company was read, stating that the directors are prepared to enter into arrangements with the Sanitary Committee for the treatment and disposal of the town sewage, and requesting them to inspect the Hertford Works, where their system is in full operation. Appended to this communication were two certificates, the one by Dr. Keates, F.C.S., stating that the effluent water from the Hertford Works, when running, was tolerably bright and without any decided odour, and that he could find nothing in the water which would render it unfit to pass into a river. Also a statement from the council of the borough of Hertford to the effect that they were perfectly satisfied with the state of the effluent water which had been discharged since the company had established their sewage works. Mr. Basham, in proposing that the matter be referred to the Sanitary Committee, observed that hitherto the only difficulty in regard to Cambridge was one of engineering. We do not know what engineering difficulties can stand in the way of carrying out the process of the Phosphate Sewage Company, unless it be that the defective state of the town sewers precludes the possibility of pumping; other towns, with levels as disadvantageous as those of Cambridge, have succeeded in disposing of their sewage either by irrigation or filtration. Several schemes for the disposal of the town sewage, which effectually dealt with the engineering difficulty, have repeatedly been brought before the Cambridge Improvement Commissioners, but which have been "submitted for consideration"; and this, we suppose, will be the fate of the present proposal. The real difficulty at Cambridge is not, however, one of engineering, but want of will and means. If the inhabitants, or rather their sanitary representatives, were really in earnest, there would be no difficulty in procuring sufficient money to provide a new and perfect system of sewers and to adopt some efficient system of dealing with their contents. Disgraceful as is the present plan of pouring the sewage into the river, the condition of the town sewers is even more so. Old, badly constructed, and pervious, as we have stated on former occasions, there is hardly any fall, and the little flow that takes place in them is further impeded by the outfalls opening under water. No wonder that sewer gases escape wherever they can find an exit from this pent-up but not impervious cesspool.

THE PERSECUTION OF MR. FENTON.

WHEN a department of the administrative government does the bidding of a subordinate authority, and, in fact, persecutes a public officer who has only failed in his duty by showing more humanity than his superiors, it is time to ask whether such a procedure does not involve an abuse of power. We think this question should be pressed on the consideration of Mr. Sclater-Booth, the President of the Local Government Board. No one can be more fully aware than is that minister of the signal failure of the guardians of St. George's, Hanover-square, to prove, or even to imply, failure or neglect of duty against Mr. Fenton, in the recent case of Charlotte Hammond, a pauper, whose death was accelerated because the relieving officer did not choose to supply the "necessaries" recommended by the medical officer. Nevertheless, Mr. Sclater-Booth has permitted the Secretary of the Local Government Board to write a grossly impertinent letter to Mr. Fenton, every line of which is enfeebled by the consciousness that there was nobody to blame, and contemptible as offensive, because, at the back of the lesser authority, it threatens what it does not dare to inflict. Mr. Fenton is warned that if he will not mend his ways, he may be called upon to resign, while the Local Government Board has not the audacity to name a single point in which he has erred! If this is the purpose to which the powers of the central Board are to be applied—to do the bidding of local authorities, with which it can have no official sympathy, but whereof the heads of the office at Whitehall are obviously afraid—we think the time cannot be far distant when it will become the duty of the Prime Minister to consider the constitution of the Board. It is impossible to read the communication addressed by Mr. Rotton to Mr. Fenton without feeling that it is one which must have sorely taxed the temper of a manly executive officer to write, and may well blush the cheek of any Englishman to read.

MORTALITY AT SEA.

THE usual annual return as to deaths that have occurred at sea was recently issued. A total of 4076 deaths were reported to the Board of Trade last year, some of which, however, are cases of seamen who had died abroad after their discharge from British ships. The causes of death show 141 cases of yellow fever, 118 of continued fevers under various names, 110 of heart diseases, 148 of consumption, 3 of scurvy; 2818 deaths were due to accident, and 1525 to wreck. There are three unsatisfactory headings that continue to occupy a prominent position—viz., "other diseases" 78, "natural causes" 45, "unknown causes" 124; so that the nosological return practically leaves 247 deaths unexplained. It must be remembered, however, that these tables are compiled from the official log-books, and that in the great majority of cases the cause of death is recorded by the master of the ship, as, comparatively speaking, few vessels carry a surgeon. It appears to us that some more explicit directions might be issued by the Board of Trade as to causes of deaths, so as to reduce, at all events to some extent, the number of entries under the last three headings quoted.

This official return is, however, incomplete because it includes some, but not all, of the deaths that occurred in

colonial vessels, and some also of those seamen who died in foreign or colonial ports. No attempt is made to include those men who died in our own hospitals, so that the return gives really no correct idea at all as to the average mortality of seamen serving in the British mercantile marine. It is, as we take it, perfectly practicable to procure such a return from the records of the Registrar-General, which would cover all deaths of seamen in the United Kingdom. And the returns from abroad might be procured in a fairly accurate form by the Board of Trade through our Colonial and Consular officers. A document of this kind would be specially useful at the present time, because it would, as we believe, show clearly that a very large proportion of sailors die from chronic diseases that must have practically incapacitated them for some time previously for useful work afloat. Such men would, of course, very seldom be employed afloat if the examination of seamen at the shipping offices were compulsory instead of, as now, permissive.

THE USE OF ALCOHOL.

A CORRESPONDENT asks a question which is pressing for a reply in many minds. What quantity of alcohol may be taken daily, in perfect temperance, and with advantage, by a lady? The answer to the question cannot be an absolute one. Alcohol has two uses, if we are to accept what seems the clear teaching of scientific observation; it is a food and a stimulant. To some extent it is consumed in the system, and yields force; it also directly affects the function of the nervous system. It is its latter use alone which must decide the question of how much may be taken. The quantity which can be utilised in the system as food is so considerable as to be certainly deleterious by its over-stimulating action on the nervous system. Moreover, as a food it has not been shown to have any special advantages. This part of its use may thus be neglected. As a stimulant the quantity really needed is very small, especially when a sedentary life is led. It is probable that in most cases two glasses of wine a day, according to our customary regulation of the size of the glass by the strength of the wine, is as much as can be taken with advantage. By many this is more than is needed. An estimate by the sensation produced is beset with fallacies. The pleasurable sense of stimulation is absolutely misleading. The use of stimulants is to facilitate work, and the ease with which work can be done and the state of body and mind *afterwards* afford a surer test. If the sense of stimulation be the guide, use establishes tolerance, and a larger and yet larger quantity can be taken without the sense of pleasant stimulation being overpassed, but not without permanent damage to the nervous system. Whatever is taken, however, should be taken at meals, once or twice a day. One large, perhaps the largest, part of the beneficial action of alcohol is to aid digestion by its direct action on the stomach, and by its action on the stomach through the nervous system. Alcohol effects most of its evil and least of its good when taken alone. All use of alcohol between meals should be absolutely prohibited.

SANITARY STATE OF LOWESTOFT.

WE noticed, in THE LANCET of Sept. 2nd, a communication from the medical officer of health of Lowestoft informing us that a considerable discrepancy exists between the figures in his returns and those of the Registrar-General. In our remarks on the "Health Statistics of English Watering-places," we pointed out that whilst Lowestoft had a low general death-rate, the deaths from zymotic disease and diarrhœa were too high for a town having such claims as a health-resort as Lowestoft. As our remarks were founded on the returns of the Registrar-General, which includes the subdistricts of Kessingland and Gorleston, we have, in order to make our comparison with other watering-places perfectly fair, worked out the figures furnished by the medical officer of health from his own returns, and which strictly apply to the Lowestoft urban and port district.

From the Medical Officer of Health's Returns.

	Annual death-rate per 1000. 1874.		1875.		1876.
From zymotic disease in spring quarters...	2·3	...	1·3	...	2·0
From diarrhœa in autumn quarters ...	3·0	...	3·3	...	—

The following table shows the annual death-rate from the same causes as originally given by us:—

From the Returns of the Registrar-General.

	Annual death-rate per 1000. 1874.		1875.		1876.
From zymotic disease in spring quarters...	1·7	...	1·7	...	1·4
From diarrhœa in autumn quarters ...	2·5	...	3·0	...	—

On comparing the two tables it will be seen that the table taken from the return of the Registrar-General is more favourable to the town than that founded on the figures furnished in extenuation by the medical officer of health! That gentleman urges that the diarrhœa mortality is rather to be ascribed to improper food than to sanitary deficiencies in the town. But even if we admit this, there is one other fact to which we would call his attention. How does he account for the prevalence of "fever" in the town during the years 1874 and 1875? During those two years no less than thirty-one deaths occurred from "fever," nearly equalling the deaths from the same cause in the same period at Yarmouth, a town of more than twice the size. Why should Lowestoft have a rate of mortality from "fever" double that of Yarmouth?

FEVER DENS IN ST. PANCRAS.

AT a recent inquest, held by Dr. Hardwicke, as to the death of Fanny Elizabeth Morley, a child residing at Upper Fitzroy-place, Euston-road, of suppressed scarlet fever, very strong remarks were made by the coroner and jury at the inquest as to the alleged neglect of the vestry or sanitary authority of the district in allowing a "fever den" to exist in the parish. These remarks were subsequently made the subject of sensational comment on the part of two or three newspapers. This condemnation of the coroner and jury was made entirely on hearsay evidence. They made no no attempt to visit the spot in question, nor can we gather that the writers, who in no measured terms condemned the vestry as guilty of the most serious neglect towards the parish, took the trouble to inquire into the truth of the evidence. Subsequent inquiries have shown that the statements made at the coroner's court were exaggerated, and certainly, in the present instance, the vestry have not been guilty of sanitary neglect.

The house in question was not overcrowded, and the other houses generally seem to be in fair sanitary condition, and their back ventilation ample. The reports of the inquest concurred in stating that the deceased child was one of five; it appears that the father had but three children, and that there were no other children living with him. In connexion with this question it is worthy of remark that Dr. Stevenson, in answer to the inquiry whether there were any places in the parish that could be dealt with by the Metropolitan Board of Works under the Artisans and Labourers' Dwellings Act, 1875, stated that after having the subject before him for a long time, and making every inquiry personally and through the sanitary inspectors, he could not find any place in the parish which could be brought under

the provisions of the statute. It is to be regretted that the coroner's court should excite the public mind by such verdicts without beforehand taking the trouble to ascertain whether the statements made before it have any foundation in fact. And we also advise the writers in the public press not to trust too implicitly to the reports they receive from their agents when commenting on them. It is always wise to hear both sides of a question, and it is decidedly unpleasant, after using strong and sensational language, to find it altogether uncalled for, and refuted by the logic of facts.

THE SALE OF OPIUM.

AN inquest, held last week at Spalding, reveals a very unsatisfactory condition of things in respect to the sale of opium by chemists. The facts of the case were simple. A man who had exhibited for some time symptoms of weakened intellect drank some laudanum, sufficient to destroy life, apparently under the impression that it would help to remove some pain for which he had been applying it externally. Under appropriate treatment with the stomach-pump, &c., the man recovered, but two days afterwards symptoms of "inflammation of the lungs" were detected, and from this cause the patient died. The problem presented to the jury to decide was the relation of the opium poisoning to the cause of death; and they rightly concluded that there was no evidence of their connexion. The gravest aspect of the case is the facility with which a large quantity of opium was and can be obtained. Laudanum was sold in large quantities to the man by two chemists, by one first one ounce was given, and afterwards two ounces more. No entry was made of the sale in the register for the sale of poisons, and it was stated by the chemists in question that the sale of laudanum is never so registered by them. Any quantity is sold, on a pretext being given for its use, without any of the restrictive regulations prescribed by the Sale of Poisons Act. This is reducing the statute to a dead letter, for it is disregarding it where it is most needed. The consumption of opium in rural districts is said to be large and increasing, especially among the wives of labourers, many of whom, we are informed, take their two or four drachms of solid opium a week, which they have not the slightest difficulty in obtaining. We cannot believe that the disregard of the provisions of the Act in respect to this article is legal, but certainly the question should be subjected at once to an authoritative decision. There is no habit more deleterious to the working classes than opium-eating, and the restriction of the sale of opium is most important, as well to lessen this as to minimise the chances of accidental poisoning.

THE USE OF ARSENIC IN SKIN DISEASES.

DR. BULKLEY, physician to the skin department of the Demilt Dispensary, New York, has communicated to the *New York Medical Journal* for August an elaborate paper on this subject. Adverting to the very common and somewhat indiscriminate use of arsenic in skin diseases, Dr. Bulkley states that there is no remedy whose action is so little understood, and withal whose effect, as generally used, is more uncertain. That arsenic has a very decided effect upon the epithelial elements of the body is unquestionable, both from physiological and therapeutical evidence. There is every reason to believe that it acts primarily through the nervous system, and that the changes induced in the skin and vascular system are secondary to this. When administered in medicinal doses, it has, he considers, quite another action from that manifested by poisonous doses; the average dose of the former is one-twenty-fourth of a grain of arsenious acid. Arsenic in medicinal doses does not produce any slow poisoning, but has been administered for months or years in quantities or small portions the aggregate amount of which would destroy life. The accounts of the toxiphagi of Styria are true, and arsenic is eaten by some for many years without apparent ill effect. It is rapidly eliminated, chiefly by the bowels and kidneys, so that the urine shows evidence of it in a few hours. The first symptom of a full dose of arsenic, in a large proportion of cases, is a fulness about the face and eyes, and conjunctival tenderness and irritation. It should always be given with or just after meals. If the urine be loaded and the tongue coated, it is better to stop the medicine for a short time and give diuretics. The dose, small at first, should be slowly increased until some of its physiological effects are manifested or the disease yields; and it should always be taken very regularly and persistently, and invariably under the supervision and frequent inspection of the surgeon. It is regarded as valuable in chronic rheumatism, and hence in arthritic eruptions; also in certain neuroses, as chorea and neuralgia,—therefore in skin diseases with neurotic elements; and it possesses anti-malarial properties, and is consequently serviceable in diseases of the skin showing periodic symptoms, and in patients with other skin diseases who have been exposed to miasmatic influences. In psoriasis, eczema, pemphigus, acne, and lichen, in proper cases, and when due regard is paid to the secretory organs and to diet and the general health, arsenic is justly regarded as a valuable remedy.

VILLAGE WATER-SUPPLY.

ONE of the most urgent of the sanitary questions of the day is the provision of our villages and small towns with pure water. Indeed, in our estimation, the question is of far greater urgency than even that of drainage. Villages, as a rule, draw their supply either directly from an adjacent river or canal, or from the too frequently polluted water-courses of the district, or from surface-wells in close connexion with the village cesspools. Two difficulties have hitherto stood in the way of practically dealing with this question—ignorance and poverty. It is remarkable how little is known by professional well-sinkers of the underground economy of the different water-yielding soils; hence the failure that so frequently follows the sinking of deep wells where geological knowledge has been disregarded in favour of the divining-rod. It is also often difficult to raise funds to meet outlay for providing for the necessary works, and to convince landlords that such expense ought to be incurred for the benefit of their tenants. We therefore hail with pleasure the practical suggestions recently made by the Rev. J. Clutterbuck and Mr. Finch Hatton. The former gentleman advocates strongly the importance of studying the underground economy of the water-yielding strata of the country, and the natural laws which regulate the supply of subterranean water and the set and direction of its currents; whilst Mr. Hatton shows how, for the trifling outlay of £600, he provided a whole village in Lincolnshire with an excellent and constant supply of pure water. The water was pumped up to a tank containing two thousand gallons by means of a pair of force-pumps connected with a water-wheel, which was turned by the water of the polluted brook in the neighbourhood; "the foul was thus made the motive power to supply the pure." Mr. Hatton states 5 per cent. is returned on the £600, thus proving, in this case at least, that the bestowal of the greatest possible boon on the tenant was not incompatible with a fair interest on his outlay to the landlord. We hope the discussion of this question will lead to further suggestions and the record of further experience, and that before long it will be quite

within the power of every village to obtain a plentiful supply of pure wholesome water from outside its inhabited area.

MORTALITY RETURNS IN HOLBORN.

Dr. Septimus Gibbon, in his annual report upon the sanitary condition of the district of Holborn during 1875, which has only recently been issued, assigns as a reason for the publication of meagre and incomplete details of the vital statistics of his district that he does not receive from the Registrar-General the particulars of the births and deaths registered therein. This statement should be amplified. Holborn is one of more than forty metropolitan sanitary authorities, none of which now receive gratuitous copies of the death-register as formerly, and all these authorities, except Holborn and five others, have arranged with the local registrars to furnish to the medical officers of health weekly copies of the register, and have agreed to pay the statutory fee of twopence per entry for the copying and transmission of the returns. It would, therefore, have been more candid if Dr. Gibbon had attributed the deficiencies of his report, in the matter of vital statistics, to the niggardliness of his authority, who still refuse to pay the registrars the sum of about £10 per annum for these weekly returns. Dr. Gibbon appears satisfied with this arrangement, because through the courtesy and public spirit of the medical practitioners and of the local registrars of the district, he hears of most of the cases and deaths from epidemic and preventable disease occurring in his district. So long as the medical officer of health is contented with this loose method the sanitary authority can scarcely be blamed for their neglect to furnish their medical officer with returns which in nearly all other districts are considered so indispensable to the due performance of his duties.

HEALTH OF RUGBY.

Dr. Wilson, medical officer of health for Rugby, who, as we stated recently, had, in consequence of the appearance of enteric fever in the district, been ordered by the Local Government Board to inquire into the causes of the disease, has with considerable promptness issued his report. It confirms what we felt it our duty to point out in describing the sanitary condition of Rugby some time back, on which occasion we were unfortunate enough to excite the wrath of the local authority. Speaking of the outbreak in 1874, Dr. Wilson says there can be little doubt that the influx of sewer air not specifically tainted was the cause of the majority of cases which occurred in 1874 and the first half of 1875, and this was owing to imperfectly flushed and badly ventilated drains. The majority of the more recent cases he attributed to polluted well-water and filth, polluted air and water. An intermittent water-supply which Rugby had received was always liable to risks of local contamination, but he was glad to report that the authority had decided to adopt a constant supply. Whilst acknowledging the efforts of the local board to improve the condition of the town, he points out that there is yet much to be done in the way of sanitary reform. Finally, Dr. Wilson is able to state that for weeks past Rugby has been quite free from zymotic disease.

SERVICE UNDER THE RED CROSS.

News from the seat of war has, during the past fortnight included numerous items of good work that is being done by both Russian and British surgeons. Mr. MacCormac, surgeon to St. Thomas's Hospital, is enabled to bring into play valuable experiences gleaned during the Franco-German war, and his services since the siege of Alexinatz in organising, in conjunction with Colonel Loyd-Lindsay, systematic hospital relief have been invaluable. Mr. MacKellar, who is working hard among the Servians, having been now enrolled in the National Aid Society, with others, left England under the auspices of the Eastern War Sick and Wounded Relief Fund. These gentlemen have in some quarters been censured for adopting the Servian uniform; but Mr. Furley, in a letter to the *Pall Mall Gazette*, explains that this expedient was absolutely necessary if any work was to be done at the front, and that "benevolent neutrals" frequently during the Franco-German war wore the uniform of one or other of the belligerents. The Red Cross badge, in fact, whether worn on uniform or plain clothes, is, or ought to be, a sufficient distinction between combatants and non-combatants.

It was reported last week that Miss Florence Nightingale, Superintendent-General of the National Nursing Association, was about to go out to the East under the auspices of the Order of St. John of Jerusalem, but the prospect of peace may probably alter these arrangements.

ANOTHER ASYLUM "ACCIDENT."

An attendant at Manor House Asylum, Chiswick, has been adjudged liable to such pains and penalties as the court may see fit to inflict for leaving a patient alone, and thereby affording him an opportunity of committing suicide. The attendant, it seems, took the precaution of placing his charge, a young man, in a strait-waistcoat, and, believing him to be safe under this restraint, retired for a quarter of an hour or twenty minutes. In that brief interval the lunatic succeeded in loosing his hands, and then hung himself from the top of his bedstead. It was a case of determined suicide, and as the attendant bore a good character, he was simply bound in his own recognisances to come up for judgment when called upon. There is an old saying that "accidents will happen," and we believe it is useless to insist that they ought to be prevented at any cost of trouble and expenditure by those who lay themselves out to undertake the care and cure of the insane. The one cause of these misadventures, in England, America, and elsewhere, is the meagre number and miserably inefficient character of the *employés* to whom the actual business of watching and attending upon the inmates of asylums is entrusted. There is only one remedy for the evil: let the law enforce the provision of a sufficient staff in every public and private institution, and let attendants be trained and certified like the mates of ships, who, when the captain leaves the deck, for the time being are entrusted with the care of passengers and freight.

THE ARTISANS' DWELLINGS ACT IN NEWCASLTE-UPON-TYNE.

There is no large town in England and Wales which, in recent years, has shown a more marked improvement in sanitary condition, judging from its mortality statistics, than Newcastle-upon-Tyne. The rate of mortality in the past three years was equal to 30·1, 29·2, and 26·1 per 1000 respectively, the average being 28·5. In Sunderland, however, the average rate in the same three years did not exceed 22·9; so that sanitary work still remains to be done in Newcastle, and the Town Council will, it is to be hoped, earnestly support Mr. H. C. Armstrong, their medical officer of health, in his recent report upon the advisability of adopting the Artisans' Dwellings Act in two unhealthy areas described as Old and New Pandon. The medical officer of health reports that the mean death-rate among the thousand persons living within those two areas, during the past three years, was 42·5 per 1000, or 14 per 1000 in excess

of the average rate in the whole borough. The sanitary condition of these districts is undoubtedly a source of danger to the whole town, as well as of disease, suffering, and early death to their unfortunate residents. We cordially endorse the opinion of the *Newcastle Chronicle*, which strongly urges the adoption of the Artisans' Dwellings Act for these areas "as a matter of comfort to the poor, as a means of safety to the general community, and as a lever for moral and social elevation." We shall watch with interest the course which will be adopted by the Town Council with reference to this recommendation of their medical officer of health.

FLUID EXTRACT OF ERGOT IN DIARRHŒA.

A SURGEON in the United States army writes to the *New York Medical Record* to state that he has obtained marked success with the fluid extract of ergot in diarrhœa. He bases the use of this drug on the theory that it causes a contraction of the involuntary muscular fibres, and in so doing relieves the atony of the vessels of the intestinal mucous membrane, and the consequent hyperæmia of the capillaries, and thus prevents the transudation of the watery portions of the blood. In other words, it gives tone to the vascular walls. The writer first tried the drug at the Cincinnati Hospital in the case of a patient with chronic diarrhœa of two years' standing. No method of treatment had been able to reduce the number of his stools to less than eight a day. He was placed on ergot in doses of forty minims four times a day. In about a week the man entirely recovered. While stationed with troops the writer also used it in twelve cases (the number of stools varying from eight to twenty in the twenty-four hours), and in one case only was he obliged to give more than three doses to each case. At this time of the year, when diarrhœa is so widely prevalent in this country, the liq. ergotæ, from the account given of it, deserves a trial at the hands of practitioners.

HEALTH OF BIRMINGHAM.

DR. A. HILL, medical officer of health for Birmingham, has issued his annual report on the health of the town during the year 1875. The death-rate in this period, although somewhat high—26·34 per 1000 annually—yet compares favourably with the returns for 1874. The zymotic death-rate was 5·86 per 1000, which is higher than the average of the eighteen large English towns, and considerably in excess of that of the metropolis. Diarrhœa caused 868 deaths, whooping-cough 438, and scarlatina 265, while fever was credited with a mortality of 204, of which number 151 were registered as typhoid. The next fatal disease, small-pox, occasioned 173 deaths. During the year Dr. Hill analysed the waters of fifty wells in the town, with the result of showing that nearly every one was contaminated by excremental matters, and quite unfit for domestic use. The majority of these wells, it is satisfactory to note, have since been disused. In the analyst's laboratory, 73 samples of food and drugs were examined, of which 28 were found to be more or less adulterated.

CHOLERAIC DISEASE IN GIBRALTAR.

UNDER the startling heading "Cholera at Gibraltar," the telegraphic news of *The Times* on the 11th inst. announced from Gibraltar, under date the day before, that "one case of cholera symptoms had occurred on the 7th inst. on board H.M.S. *Defence* when lying alongside the Mole." The ship, it was further stated, had been immediately placed in strict quarantine, but she left the Bay to cruise in the vicinity, and had subsequently signalled that the case was progressing favourably. We hope some correspondent will favour us with the details of this event, and that these details will give a somewhat different complexion to it than appears from the telegraphic message. As the fact stands, it is as little creditable to the ship as to the Gibraltar authorities. Is choleraic disease so little known on the Mediterranean that the occurrence of choleraic symptoms at a time when no migration of the epidemic malady is in progress must lead to so vague an opinion being formed of the nature of an attack on board one of H.M.'s ships as to give occasion for the quarantine authority to be called into play? Or, on the other hand, is the Gibraltar quarantine authority so little under the control of the supreme Government that it may emulate, if it wills, the follies of Levantine quarantine action? The announcement in *The Times* will quite needlessly have aroused into action all the quarantine authorities in the Mediterranean, and have subjected to a purposeless, even if but brief, embargo very many trading vessels.

JOURNALISTIC DELICACY.

IT is our duty briefly but emphatically to record a protest against sensational journalism consisting of nauseous details on purely professional subjects. One of our evening contemporaries, in superlative "big gooseberry style," amused (or more probably disgusted) its readers at the end of last week with a minute account of the old Hôtel Dieu at Paris, which, as most of our readers know, will soon be a thing of the past. "Our own correspondent," with ghastly pleasantry, plunges at once into the dead-house and the dissecting-room, and revels in revolting particulars about jars of "pickles," "bleaching bones," and "simmering skulls." We have neither space nor inclination to quote verbatim from this excessively unsavoury composition, which cannot serve any useful purpose.

ENTERIC FEVER has been prevalent in the village of Hanwell for weeks past. The medical officer of health for the district, Dr. Burton, now reports to the local authority that since the 11th July last there have been 64 cases of typhoid, 6 of which proved fatal. The disease was entirely confined to the poorer classes. At present 22 cases are under treatment. Dr. Burton attributes the epidemic to "impure air, bad water, and want of drainage," and it will be seen that the arrangements of the village are grossly deficient, and quite sufficient to account for the outbreak. Cesspools abound, and in many the contents are allowed to accumulate and ferment. The soil being "gravel on clay," readily absorbs sewage matter, and thus the surface wells become polluted. The water-supply has become tainted with sewer-gas through cisterns having direct communication with closets by means of their waste-pipes. Although a fresh case has occurred within the last few days, Dr. Burton is enabled to state that the disease is subsiding.

PROFESSOR PACCHIOTTI, president of the Italian Medical Congress, which meets at Turin on the 18th inst., announces that the physicians and surgeons of the Turinese province have offered two gold medals (value 500 lire each) for two essays: one on "Lunacy," and the other on "Foundling Hospitals, and their Relations to Infantile Mortality." Further particulars as to the conditions under which the medals will be competed for will be given at the congress.

DR. CH. FAUVEL, whose monograph on Laryngeal Growths was recently noticed in these columns, has been nominated Chevalier of the Legion of Honour, for "important scientific labours, for services rendered in the ambulances during the siege, and for exceptional services."

THE twenty-second report of the Postmaster-General on the Post-office, just issued, does not contain much matter of medical interest. Dr. Waller Lewis, the chief medical officer of the department, states that during the past year the staff showed an exceptionally favourable condition of health, the deaths being in the proportion of less than 5 per 1000 of the persons employed. It is pointed out that this rate of mortality contrasts most favourably with that of the metropolis generally, and also even more markedly with the death-rate of officers of the department twenty years ago, which was between 14 and 15 per 1000. There was very little illness of a severe character among the *employés* during 1875. Referring to the practice of giving drink to letter-carriers, attention to which was directed in a previous report, the Postmaster-General is glad to be able to state that there is evidence that the evil in question has greatly diminished.

ACTION was lately taken by the Willesden Local Board under the 97th section of the Public Health Act, dealing with houses unfit for habitation. It was proved, by the evidence of the sanitary inspector and others, that certain houses were in a most filthy state—some of them without waterclosets, and in one or two instances the drain opened into the basement floor. In several of them, moreover, seven or eight families had been living. Last week an order was made by the magistrates for the closing of eleven of the condemned houses, which are situated in the Pembroke-road, Kilburn.

THE Greenwich Hospital Pension of £30 per annum, vacant by the death of Dr. John Watson, has been conferred upon Deputy Inspector-General Robert McCormick, R.N. Mr. McCormick accompanied Sir E. Parry in the *Hecla* in the attempt to reach the North Pole in 1827; was surgeon on board the *Terror*, commissioned for the relief of ice-bound whale-ships in 1836; was chief medical officer and naturalist to the Antarctic expedition in 1839–43; and commanded the *Forlorn Hope* in search of Sir J. Franklin in 1852. He was awarded the Arctic medal in 1857.

A RECENT Parliamentary return shows the number of male persons, aged between eighteen and twenty-five years, living in the several divisions of the United Kingdom at the two census examinations in 1851 and 1871. This return contrasts vividly the movement of the population in England and Ireland during those twenty years, and especially its effect on the two countries regarded as recruiting grounds. In England the males at these ages showed an increase of 21 per cent. in the twenty years, whereas in Ireland they had decreased by 30 per cent.

AN outbreak of scarlet fever has been reported to the Town Council by the medical officer of health for the borough of Truro. This town has in former times suffered severely from this disease, and stringent precautions have been recommended to prevent the spread of the fever. The borough of Truro has a population of about 10,000 persons, and it appears from the Registrar-General's last Quarterly Return that scarlet fever of a severe type prevailed in the neighbouring registration sub-district of St. Agnes during the three months ending 30th June last.

THE text of the President's decree, nominating professors to the newly-formed faculty of Medicine and Pharmacy at Lille, appears in last week's Paris journals. The list includes all the former professors in the Lille school, and one newcomer—viz., M. Coyne, of Paris, who has been nominated to the chair of Pathological Anatomy and Normal Elementary Histology.

WE learn that the small-pox epidemic at Blackburn is increasing at a most alarming rate. Nearly twenty fresh cases have been reported within the last few days. There is now something like a panic in the town; many of the inhabitants are leaving, the streets in certain quarters are barricaded, and the hospital is inconveniently crowded with patients, some of whom present a very aggravated type of the disease. It is contemplated to erect another hospital at once. The sanitary authorities appear to be doing all in their power to cut short the progress of the epidemic.

DR. ORME DUDFIELD, medical officer of health for South Kensington, has forwarded to us a "Special Report on the alleged Chronic Prevalence of Typhoid Fever in South Kensington." It is written to rebut the accusations made by Sir Henry Cole in a letter to the Metropolitan Board of Works, and subsequently published in *The Times*. We have already dealt as far as is necessary at present with the subject.

AT the Thames Police-court last week, James Foster, of Bruce-road, Bromley, was fined £20 and costs for falsely representing himself on a death certificate as a licentiate of the Society of Apothecaries. The proceedings were instituted by the East London Medical Defence Association.

THE new reservoir to supply the University and City of Oxford with water has been commenced. We understand that the work will be pushed on rapidly.

THE SIMON TESTIMONIAL.

AT a meeting of the Committee held on Thursday, attended by Dr. Cornelius Fox (in the chair), Professor Corfield, Captain Clode, and Mr. A. Haviland, it was resolved, in deference to Mr. Simon's wishes expressed in his letter to Mr. Haviland, that the original intention of founding a Scholarship and Medal as a Testimonial in recognition of his long and distinguished services to his country in advancing Sanitary Science, be abandoned, but that it be referred to a subsequent meeting of the Committee to consider the advisability of presenting a marble bust of Mr. Simon, to be placed in the Royal College of Surgeons. It was also resolved that the desirability of limiting each subscription to a certain amount be discussed at the next meeting, which will be held on Wednesday, the 25th October next.

The following is Mr. Simon's letter:—

MY DEAR HAVILAND,—For the last four days I have had on my mind a matter about which I have been eager to write to you; but my time has been so entirely absorbed in other business (among which not least that of the Vivisection Bill), that now is the first opportunity when I have been able to secure a little leisure for my purpose.

I observed in the medical journals of last Saturday, and in *The Times* of the day before, paragraphs to the effect that you, as secretary for a Committee of Officers of Health and others, are taking steps to get up an expensive testimonial to me on the occasion of my having retired from the public service.

I must (as needs hardly be said) feel deeply the very great kindness and the very great honour which are done to me by such an intention as is described. And I feel it the more because I daresay it represents, on the part of those who have entertained it, knowledge (more or less) of the extreme difficulties in which my later years of office have been passed, and the sympathy which has in consequence been felt for me, at least in my own profession, that at last those difficulties result in the closure of my official career.

Those being in all sincerity my feelings in one point of view, towards the intention which is described, let me hope,

my dear Haviland, that you will not deem me ungrateful and churlish if I refer to some considerations of a different kind which lead me personally to hope that the intention may not be persevered in.

In the first place, so far as you appeal to the general public, the public may quite properly reply that its account with me is already closed. In return for the livelihood which they gave me, I undertook to work my best for them in my province of duty; and if this "best" has been of some usefulness, such, I need hardly say, was the hope with which they engaged me to work, and for which my sufficient salary was awarded me by them. Granted (as I trust it may be) that, in the office which I held, I loyally endeavoured to do my full duty, this praise (and I can pretend to no higher) is but such as would very rarely not be due to any high officer in the Civil Service; and, in the general tone of that service, no particular credit attaches to doing what it would be simple discredit to leave undone.

But, secondly, and a thousand times more, so far as your appeal addresses itself to members of our own profession, let me say how really grieved I should be that they were asked to give money to do me honour. I hold my profession in the utmost love and reverence; and if I have earned the good opinion of my brethren in it, particularly of those of them with whom in the different parts of my career I have had relations (and such happy relations) of fellow-workmanship, no other distinction than I can ever hope to have will be as dear to me as my consciousness of this. But such needs not be a matter of testimonial. It can be quite sufficiently attested in the kindliness with which my old friends meet me and write to me, and in the welcome with which, for such little work-time as may yet remain to me, they will, I hope, still let me stand shoulder to shoulder with them in the studies and struggles which concern us all.

Ours is not an over-affluent profession, and the system of costly testimonials among us should be reserved for very special occasions. In the rank and file of our profession are very great numbers of men who in different spheres of inconspicuous duty have worked their long laborious years in the same spirit as I have worked, yet often with little but their love of knowledge and of usefulness to cheer or requite them; and in proportion as I should count it among my highest rewards to have the approval and sympathy of such men for the work which during so many years I have been carrying on, and for the endeavours which I have sincerely made to contribute my quota to the life and growth of our joint profession, just so should I deeply regret that their kindly feeling towards me were appealed to for any sort of monument to glorify me. My present case (for I hope that my powers of usefulness may not yet be quite extinct) would fairly fall within the general rule—"*Nemo ante obitum testimonialis fetur*:" but even were it otherwise, and could I suppose that my ashes of cremation to be speaking hereafter on my behalf, their sentiment would, I trust, still be faithful to mine,—

> "Be but the Spartan's epitaph for me:
> 'Sparta hath many a worthier son than he.'"

Again let me express my hope that you will not in any degree misunderstand the spirit in which I have asked you, and those who are acting with you, to relinquish the intention of a Testimonial. Believe, all of you, how very grateful, how very flattered I feel, in learning an intention which in itself is already enough to crown me in imagination with many laurels. And let me, un-testimonialised except with the memory of that most kind and generous intention, remain, dear Haviland,

Your obliged friend and fellow-worker,

July 26th, 1876. JOHN SIMON.

HEALTH OF THE CITY.

ON Tuesday Dr. Sedgwick Saunders presented to the Commissioners of Sewers a report on the health of the City during the recess. In the seven weeks ending September 12th, the public health was unusually good; 125 deaths had been registered, the births in the same period amounting to 226. It is noteworthy that not a single case of fever was recorded in the period, and one case only of small-pox came under observation. There were 1461 houses inspected, 218 of which were found to require sanitary improvement in various particulars. Sixty-two articles had been disinfected, at the disinfecting chamber, and returned to the owners. The markets and slaughter-houses were duly inspected by the officers, who condemned over 56 tons of meat (23 tons were taken in one day) as unfit for human food. Under the heading of "Polluted Wells" it is stated that the water from Bartholomew-lane pump is heavily charged with sewage products, and most dangerous for domestic use. Another supply was also found to be equally bad. It is much to Dr. Sedgwick Saunders' credit that he should continue to perform his duties during the recess, and we trust the Commissioners are not unmindful of the sacrifice he makes in order to carry on the sanitary work of the City of London.

Correspondence.

"Audi alteram partem."

MEDICAL EDUCATION AT CAMBRIDGE.

To the Editor of THE LANCET.

SIR,—So much is said in many quarters as to the cost of university education that I venture to think some of your readers would be willing to know the results of my experience of the expenditure of non-collegiate students at Cambridge, of whom I have had the immediate charge for the seven years during which the scheme has been in operation.

It is convenient to take first into consideration the minimum expenditure by which an ordinary B.A. degree can be obtained. It must be assumed that the student is at the outset fairly prepared for university study, and that he only resides in Cambridge as long as he is required to reside in order to keep his terms. Those who are specially ill-prepared, as well as those who aim at higher distinction, require special help from private tutors, which is necessarily costly. Those who pursue professional studies will attend special courses of lectures, which, here as elsewhere, must cost something appreciable in addition to the minimum outlay as described above. Students of the latter classes find it desirable to reside a few weeks longer in each year than they are required to reside to satisfy the University statute. Putting aside these special cases, it has been abundantly ascertained that a student accustomed to live cheaply can keep terms and obtain a B.A. degree upon an annual expenditure averaging for the three years £50, and that even an inexperienced student can easily restrict his annual expenditure to £60. The heads of necessary expenditure may be thus accounted for: £10 a year will cover university dues, including fees for matriculation, for examinations, for degree and for supervision; £10 a year will provide for college lectures, for the obligatory professors' lectures, and for the really necessary books and stationery; £30 a year, allowed for household expenses during twenty-three weeks, may be made to include the small initial outlay necessary for caution money and cap and gown. It is under the head of household expenses that the chief variations will occur; and in the main, and in the long run almost entirely, the differences will depend upon the habits and wishes of the students themselves. For instance, while the household bills of one student are 24*s.* a week, those of another, in equally cheap lodgings, are 35*s.* because the latter needs or desires a more liberal diet.

A medical student is required to reside in Cambridge for the same length of time as a candidate for the B.A. degree—viz., nine terms, or parts of each of three years; and in order to pursue his studies with advantage it is desirable that he should reside for a longer time in each year than is absolutely required, including parts of the vacations. This additional residence would probably add £15 to the £50 or £60 above stated as the minimum, and the lectures he would attend would probably amount to another £10, making a total of about £85 a year for each of the three years. He may, during this time, obtain the B.A. degree, either in the ordinary way, or by means of the Natural Sciences Tripos, the subjects of which correspond to those of his professional studies. This, it will be understood, is the sum which has

to be spent for residence and study within the university. He will ordinarily be required to pursue his medical studies, either in the university or elsewhere, for about two years more, before or after the three years' residence in the university, to obtain a medical degree or qualification to practise.

It appears, therefore, that the total cost of residence and professional education in the university need not exceed £85 a year—that is, £255 for the three years. To those who wish simply to fulfil the university requirements of residence without professional instruction the cost need not exceed £50 or £60 a year—that is, £150 or £180 for the three years. The fees for the examinations for the M.B. degree amount to £5 5s., and for a non-collegiate student who is already B.A. the fees on taking the M.B. degree amount to £5 3s.

I do not take into account the cost of professional education additional to that given in the university, as I have no means of computing that.

I think I have said enough to show that the necessary expenses are not such as to preclude even students of very moderate means from obtaining medical degrees at Cambridge.

I am, Sir, yours obediently,

R. B SOMERSET,

Cambridge, August 26th, 1876. Censor of Non-Collegiate Students.

HEALTH OF LOWESTOFT.

To the Editor of THE LANCET.

SIR,—In an article on the health of English watering-places, in a recent number of THE LANCET, special attention was directed to the high mortality from zymotic diseases and diarrhœa at Lowestoft, and an inference was drawn "that the sanitary conditions are anything but perfect," and that there must be "some defect in the drainage or water-supply."

The local medical officer of health has since taken exception to your figures, and has published in your columns results differing from those of the Registrar-General, and has ascribed the high death-rate from diarrhœa to be due to improper food rather than to bad water and defective drainage.

Having had occasion to complain of the unhealthy condition of one of the best lodging-houses of Lowestoft, I have recently investigated the system of public and private drainage and water-supply of this deservedly popular watering-place, and my investigations lead me to confirm as correct your inferences as to the causes of the prevailing high zymotic death-rate, and for the following reasons:—

1. The drainage of the new town of Lowestoft and Kerkley is, in my opinion, defective and dangerous, because the outlet of the main sewer opens into the harbour two feet *below* low-water mark; its contents are, therefore, often stagnant, according to the rise and fall of the tide, its sewer-gas influenced not only by pressure from a similar cause, but also developed more rapidly and in larger proportions by the chemical action of salt water, which acts on sewage with greater intensity than river or fresh water.

2. The main sewer of this portion of the town is supplied with but two proper ventilators, and is thus very inefficiently ventilated, considering the nature of its outlet and the pressure on its gas.

3. As a rule, there is no system of traps or ventilators between the private drains of the lodging-houses and the common sewer, so that, with very few exceptions, the water-closet soil-pipes, sink-pipes, and rainwater-pipes communicate directly with the street-sewer without the interception of either trapping or ventilation.

As to the water-supply, very many of the lodging-houses still obtain water for drinking purposes and domestic use from wells. The very last analysis made by the late Dr. Letheby was of Lowestoft well-water, which he condemned as "quite unfit for domestic use, being so polluted with drainage matters." In many of the lodging-houses the cisterns for flushing the water-closets obtain their supply from rain-water only, and in dry summers are frequently empty. The water supplied by the Lowestoft Waterwork Company, on the other hand, is certified by Professors Voelcker and Tidy to be in every respect pure and wholesome.

Notwithstanding its low general death-rate and the explanations of its medical officer of health, the returns of the Registrar-General, as quoted in your article above alluded to, must be accepted. They prove that its zymotic death-rate is high, and I can supplement this by recording some cases of zymotic diseases which have occurred amongst visitors at Lowestoft due to defective sanitation, two of them (diphtheria) being members of my own family; but these, with your permission, I will give in a future number, contenting myself now by the above statements as to the drainage of that part of the town most frequented by visitors, and by calling attention to the fact that the medical officer of health, by his method of calculation, has made matters appear worse instead of better, so far as the diarrhœa death-rate is concerned. For example, your statement, based on the Registrar-General's Returns, gave the annual death-rate from diarrhœa at 2·5 for 1874, and 3·0 for 1875. His deaths from the same cause, when worked out, give the increased death-rate of 3·0 for 1874, and 3·3 for 1875.

I am, Sir, your obedient servant,

MICHAEL BEVERLEY, M.D.

St. Giles-street, Norwich, September 9th, 1876.

THE RED CROSS SOCIETY.

To the Editor of THE LANCET.

SIR,—In *The Times* of Wednesday, Captain Nolan states that the symbol of this Society is not respected by the Turkish soldiers at the seat of war.

With a view to protect our professional brethren, and others mercifully engaged there, from ignorance and fanaticism, I suggest that the Society should add the *Crescent* to the existing badge during the present war. This double emblem would be respected by both sides.

I am, Sir, yours, &c.,

C. F. MAUNDER,

Surgeon to the London Hospital, formerly Surgeon on the Staff of the Army in the Crimea.

Queen Anne-street, W., Sept. 14th, 1876.

*** We fear the adoption of Mr. Maunder's suggestion would increase the risks of the medical officers. Instead of being shot at by one side only, they would be likely to receive the bullets of both forces.—ED. L.

REPRESENTATION OF THE MEDICAL PROFESSION IN PARLIAMENT.

To the Editor of THE LANCET.

SIR,—On the last day of the meeting of Parliament, and just before the sitting came to a close, the Lord Advocate (Mr. Gordon), in presenting a petition from the council of the Poor-law Medical Officers' Association in favour of the Scotch Poor Bill, took the opportunity of stating "that though the exigencies of public business had compelled the withdrawal of the Bill, it was his intention in the next session to re-introduce the measure, and that at any rate he would endeavour to carry the clauses relating to medical relief."

In this day's paper I perceive that, Mr. Gordon having been made a judge, his seat as the representative of the conjoint Universities of Glasgow and Aberdeen is vacant, and already another lawyer is announced as a candidate. Now I believe I am correct when I state that the majority of the electors are medical graduates. Surely, if they were to put forward a candidate they might secure the seat; and this action is most important just now, for not only is the chance of getting any amendment of Scotch Poor-law medical relief rendered small indeed, but our just claim to higher consideration from the several public departments with which we are connected is rendered very difficult of attainment, even if not too frequently wholly disregarded, by the fact that we have no one specially deputed to look after our interests in Parliament. To instance one case: can it be supposed that such unjust treatment as that to which Mr. John Simon was exposed, which not only led to his resignation, but to the loss to the community of his valuable public services, would ever have been permitted if we had had some distinct representative on whom we could rely to question and expose the conduct of the department towards him.

There are, however, many other questions with which the interests of the profession are largely associated which would be materially advanced could we secure this seat in Parliament for one of ourselves.

I am, Sir, yours, &c.,

Dean-street, Soho, Sept. 12th, 1876. JOS. ROGERS.

Obituary.

VICTOR DE MÉRIC, M.D. GLASG., F.R.C.S.

MR. DE MÉRIC was born at Strasbourg on the 24th of June, 1811, of an old French family. He came to this country very young, and was engaged in literary and teaching pursuits up to 1844. In that year he went and studied medicine at Dublin. After three years' study he repaired to Glasgow, where he graduated in 1847, and subsequently passed the College of Surgeons in London, and closed his studies in Paris under Ricord. He returned to London, published Ricord's lectures, and set up in practice. In 1856 he obtained the Jacksonian prize for Syphilis, and in 1858 published his Lettsomian Lectures on the same subject. In the meanwhile Mr. de Méric was appointed surgeon to the German Hospital, and also surgeon to the Royal Free Hospital; and in the year 1863 he obtained, by examination, the Fellowship of the Royal College of Surgeons. In 1875 Mr. de Méric was elected president of the Medical Society of London. He was very unpretentious in his ways, and made but few enemies. Within the last few years he suffered a great deal from bronchitis, and was seized at the beginning of this year with a very severe attack of prostatitis, from which however he recovered, though he succumbed on the 29th ult. to what appeared to be a closure of the pylorus.

Mr. de Méric, from an early period of his career down to his death, was connected with this journal. For many years he was the compiler of that important part of the journal, the "Mirror," in which the hospital practice of the physicians and surgeons of the principal London and provincial hospitals is reflected. It is only due to Mr. de Méric to say that the "Mirror" was both faithful and effective when it was in his hands. Of late years he had been too much occupied in practice to make regular contributions to our columns. But he never lost his aptitude for journalism, and never ceased to be a valued member of our staff.

In the Societies of London, especially in the London Medical Society, Mr. de Méric's genial and intelligent face was one of the most familiar; and no speaker was more acceptable in debate. Though not an Englishman by birth, his oratory was most happy, and his argument convincing. On syphilis and kindred subjects he spoke with the authority of one who had had large opportunity of observing, was profoundly versed in the best doctrines of the best men, and yet knew how to prefer truth to his greatest teacher, when he thought that his teaching had been shown to be erroneous. His reverence for Ricord was unbounded, but he was not so wedded to his views as not to be able to modify them in accordance with advancing discovery. His address as President of the Medical Society of London, in October 1874, on Ricord and his School was a very fine instance of the friendly justice which a discriminating pupil can do to an esteemed master by making ample confessions of points in respect of which his teaching has been corrected or superseded, and yet vindicating the soundness of its fundamental parts.

Mr. de Méric was known chiefly as an authority on syphilis. So much was this the case that no discussion of the subject seemed complete without the contribution of his practical experience, which was always made, as we have said, in a way clear and interesting. He was, of course, one of the witnesses examined at much length by the Committee appointed to inquire into the Pathology and Treatment of the Venereal Disease, with a view to diminish its injurious effects on the men of the army and navy. His opinions were in favour of the duality of the venereal poison; he denied the contaminating power of the mere vaginal secretions of syphilitic women; he was a great believer in mercury for the indurated sore, for secondary symptoms, and even for some tertiary ones, and in the use of preventive measures such as those authorised in the Contagious Diseases Acts. Though Mr. de Méric was known chiefly as an authority in regard to syphilitic diseases, he kept up his acquaintance with all parts of the science of medicine and surgery, as developed both at home and abroad. He was, too, one of the kindest, most courteous, and most unselfish of men, the memory of whose bright and cheering countenance, even tinged, as it had been of late years, with a look of gravity, will be long and pleasantly remembered by us.

FRANCIS SIBSON, M.D. LOND., F.R.C.P., F.R.S., &c.

WE regret to record the death of Dr. Sibson, which occurred suddenly at Geneva on the 7th inst. The event has deprived the profession of a member of much energy and of considerable merit. Of late years Dr. Sibson had been chiefly known in connexion with the Council of the British Medical Association, of which he was, at the time of his death, vice-president, and at one time president. In 1870 the Association requested Dr. Sibson to deliver the Address in Medicine at Newcastle, when he chose for his subject the Treatment of Acute Rheumatism and Gout by Rest. He was the author in 1869 of a work on Medical Anatomy, confessedly one of the best we have; and of various papers, such as that on the Mechanism of Respiration, which appeared in the "Philosophical Transactions" for 1846, and that on the Position of the Internal Organs in Health and Disease pubitshed in the *Provincial Medical Journal* for 1844. He delivered the Croonian Lectures in 1870 on Aneurism of the Aorta. Dr. Sibson lived in Brook-street, and had a considerable practice. He was consulting physician to St. Mary's Hospital. He was one of the best auscultators and stethoscopists in London, and had the knack of teaching other physicians of no slight attainments various points in this important branch of physical diagnosis. His connexion with the executive of the British Medical Association involved him in much semi-political and administrative work, but for which perhaps he might have taken a still higher position as a physician of great diagnostic power, of much common-sense, and of sound therapeutical instincts. He had a very social nature, and was interested in many subjects beyond the bounds of his own profession. *The Times*, in a notice of his death, says that he had formed one of the finest collections in existence of a particular class of objects manufactured by Wedgwood, especially the medallions and plaques designed by Flaxman.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on August 31st and September 7th:—

Bayley, Reginald, Kingston-hill, Surrey.
Chavasse, Thomas Frederick, Birmingham.
Keer, John Cordy, Wickham Market.
Newton, Richard Arthur, Birmingham.
Thomas, Hugh William, Birmingham.
Wagstaff, John Philip, Marlborough-road, Dalston.
Williams, Alfred Glover, Carmarthen.

The following gentlemen passed the Primary Professional Examination on the same days:—

Alfred Blackmore and Samuel Butler, Owens College, Birmingham; Edgar Hunt Dumbleton, Queen's College, Birmingham; Alfred George Wells, Guy's Hospital; Frank Taylor, Bristol Medical School.

THE library of the Royal Medical and Chirurgical Society was re-opened on Thursday, the 14th instant.

UP to the present time the sums received towards this year's Hospital Saturday Fund amount to £2750.

THE Rev. Arthur James Skrimshire, M.D. Univ. Edin., who was formerly in practice at Sudbury, and has since been vicar of Long Thorpe, near Peterborough, for twenty-six years, has been appointed rector of Hadleigh, Essex.

THE Lord Lieutenant of Ireland has appointed Dr. W. M. Burke to the post of Registrar-General for Ireland, vice Mr. Donnelly, C.B., resigned.

YELLOW FEVER is raging with extreme virulence in Savannah. Since the 21st August 277 persons have been attacked with the disease, of whom 46 died.

THE next Examinations for Sanitary Science Certificates by the University of Cambridge will be, in Part I. on Tuesday and Wednesday, the 3rd and 4th October, and in Part II. on Thursday and Friday, the 5th and 6th October. These examinations are open to those whose names are on the Medical Register of the United Kingdom, whether members of the University or not. Candidates must send their applications for admission to the next examinations on or before September 19, to Professor Liveing, Cambridge.

MEDICAL MAGISTRATES.—Dr. John Walters has been placed on the Commission of the Peace for Reigate.—Dr. George Moore, of Hartlepool, has been placed on the Commission of the Peace for the County of Durham.

VACCINATION GRANTS.—The following gentlemen have received grants from the Local Government Board for efficient vaccination:—Dr. Cuolahan, £99 19s. (second award); Mr. J. Prior Purvis, of Greenwich, £49 13s. (third award); Dr. J. P. Lewis, of Basingstoke, £13 12s. (third award); Mr. E. H. Snoad, Yoxall, Lichfield, also for the third time; Mr. W. W. Young, of Aldershot, £27 (second award); Mr. Harvey Mead, of Christchurch, Hants, £26 2s. (third award).

GLASGOW MEDICO-CHIRURGICAL SOCIETY.—At the first meeting of this Society for session 1876-77, the following office-bearers were elected:—President: Dr. Eben. Watson. Vice-Presidents: Dr. Robert Perry and Dr. G. H. B. Macleod. Council: Dr. A. Patterson, Dr. H. Miller, Dr. D. Taylor (Paisley), Mr. A. Macfarlan, Dr. Thomas Reid, Dr. T. M'Call Anderson, Dr. J. Graham (Paisley), Dr. Wm. Macgill. Secretaries: Dr. Joseph Coats and Dr. G. P. Tennent. Treasurer: Dr. Hugh Thomson.

Medical Appointments.

ALDERTON, T. G., L.R.C.P.L., M.R.C.S.E., has been appointed Administrator of Anæsthetics to the West London Hospital.

ANNINGSON, T., L.R.C.P.L., M.R.C.S.E., has been appointed Honorary Surgeon to the Grimsby and District Hospital, Great Grimsby.

BALLS-HEADLEY, Dr. W., has been appointed Honorary Physician to the Alfred Hospital, Melbourne.

BRUNTON, D. M., M.A., M.B., C.M., has been appointed House Surgeon to Paisley Infirmary, vice Dr. Alexander, resigned.

BUCHAN, C. F., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Barton District of the Luton Union, vice Hind, resigned.

CROFTS, W. H. B., B.A., has been appointed Medical Officer to the Brotherly and Friendly Society, Kettlewell.

DAVIDSON, D. C., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident House Surgeon to the Western General Dispensary, Marylebone-road, vice Skelly, resigned.

DYSON, W., M.D., B.A., has been appointed Lecturer on Physiology at the Sheffield School of Medicine.

EDMUNDS, W. G., M.B., M.R.C.S.E., has been appointed House Surgeon to St. Thomas's Hospital.

FAIRBANK, F. R., M.D., M.R.C.P.Ed., has been appointed Surgeon to the Doncaster General Infirmary, vice F. C. Fairbank, M.R.C.S., deceased.

FINLAY, D. W., M.D., M.R.C.P.L., has been appointed a Physician to the Royal Hospital for Diseases of the Chest, City-road.

FROST, W. A., L.R.C.P.L., M.R.C.S.E., has been appointed House Surgeon to the North Staffordshire Infirmary, Hartshill.

GILL, J., M.D., L.R.C.P.Ed., has been appointed Honorary Consulting Physician to the Royal Asylum of St. Anne's Society Schools, Streatham-hill, vice Ord, resigned.

HUTTON, Mr. N. R., has been appointed Public Analyst for Stirling, vice Paton.

KENNEDY, A. E., L.R.C.P.Ed. & L.M., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer for the Victoria Dock District of the Midland Railway Company's Friendly Society, vice Morris, deceased.

LAWSON, G., F.R.C.S.E., has been appointed Surgeon to the Middlesex Hospital, vice De Morgan, deceased.

MCALDOWIE, A. M., M.B., C.M., has been appointed House Physician to the North Staffordshire Infirmary, Hartshill.

MADELEY, E., M.R.C.S. & L.S.A., has been appointed a House Surgeon to the West London Hospital.

MILLMAN, T., M.R.C.S.E., has been appointed Resident Accoucheur to St. Thomas's Hospital.

NICHOLSON, J. F., M.R.C.S.E., L.S.A.L., has been appointed House Physician to St. Thomas's Hospital.

OLIVER, T., M.B., has been appointed Medical Officer for the No. 2 District of the Preston Union.

PAGE, D., M.D., has been reappointed Medical Officer of Health for the Bowness, Grasmere, Kendal, Kirkby-Lonsdale, and Windermere Urban, and East Ward, Kendal, Sedbergh, Ulverstone, and West Ward, Rural, Sanitary Districts, at £600 per annum for three years.

PENDLETON, R. W., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer of Health for the Toxteth-park Urban Sanitary District, vice Carter, resigned.

PRIDEAUX, E., L.S.A.L., has been appointed Resident Medical Officer to the Small-pox Hospital, Derby.

PURNELL, T., M.D., L.R.C.P.Ed., has been reappointed Medical Officer of Health for the Glastonbury Urban Sanitary District till May, 1877.

SHORT, W., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer of Health for the Harrogate Urban Sanitary District, vice Deville.

SMITH, H. L., K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Thornham and part of Royton District of the Oldham Union, Medical Officer of Health for the No. 2 Sub-district of the Oldham Rural Sanitary District, and Medical Officer to the Oldham, Middleton, and Rochdale Coal Company, vice Drummond, resigned.

STEPHENS, E. B., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer for No. 1 District of the Workhouse of the North Witchford Union, vice Ryley, resigned.

UPTON, A., M.R.C.S.E., L.S.A.L., has been appointed Resident Medical Officer to the Western Branch of the Brighton and Hove Dispensary, vice Medcalf, resigned.

WADE, A. B., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the Royal South Hants Infirmary, Southampton, vice Cassan, resigned.

WALLIS, H., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for No. 4 District of the Eastbourne Union, vice Sanger, deceased.

YOUNG, C. G., M.B., C.M., has been appointed Medical Officer to Oystermouth Castle Lodge of Odd Fellows, M. U., vice Bramhall, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BERRY.—On the 6th inst., at Bracondale House, Wimbledon-hill, the wife of Otho W. Berry, M.R.C.S.E., of a son.

CARLESS.—On the 18th ult., at The Grove, Devizes, the wife of E. N. Carless, M.B., of a son.

COLLINS.—On the 26th ult., at Osborne Villas, Windsor, the wife of W. Maunsell Collins, M.D., Scots Fusilier Guards, of a daughter.

EDIS.—On the 3rd inst., at Wimpole-street, Cavendish-square, the wife of Arthur W. Edis, M.D., of a daughter.

HAYNE.—On the 3rd inst., at Northfleet, the wife of Frederick Greaves Hayne, M.R.C.S.E., of a daughter.

MARSHALL.—On the 30th ult., at Oak Bank, Lamberhurst, the wife of John James Marshall, L.R.C.S.I., of a son.

NORTON.—On the 8th inst., at Gower-street, the wife of Selby Norton, M.D., of a daughter.

POLLARD.—On the 1st inst., at Lamb's Conduit-street, the wife of Clement Pollard, L.R.C.P.Ed., of a son.

REILLY.—On the 2nd inst., at Amesbury House, Victoria-park-road, Hackney, the wife of Frederick J. Reilly, M.R.C.S. & L.R.C.P., of a son.

ROWLAND.—On the 7th inst., at Malvern Wells, the wife of H. Mortimer Rowland, M.D., of a daughter.

SMITH.—On the 2nd inst., at Burgess-hill, the wife of William J. Smith, M.B., of a son.

MARRIAGES.

CLARKE—TILLY.—On the 9th inst., at the British Embassy, Paris, by the Rev. Canon Maunsell, T. Kilner Clarke, M.A., F.R.C.S., M.D., of Huddersfield, to Adèle Agnes, daughter of William Tilly, Esq., of Neuilly, Paris.

HAYNES—JONES.—On the 30th ult., at St. Mary's Church, Acton, by the Rev. C. Musgrave Harvey, Rector, the Rev. A. B. Dickinson, Rector of Old Radnor, and the Rev. Alfred Scott, Horace Eyre Haynes, of Evesham, to Lucy Marion, second daughter of Frederick Jones, Esq., of The Friars, Acton. No cards.

PRINS—LEAN.—On the 13th July, at St. Peter's, Riccarton, New Zealand, by the Rev. F. A. Hare, Henry Horsford Prins, M.R.C.S.E., third son of the late Dr. John Theobald Prins, of Ceylon, to Emily Constance, eldest daughter of Alexander Lean, of Christchurch, Canterbury, New Zealand.

DEATHS.

ANDERSON.—On the 12th inst., of diphtheria, at Lauder-road, Edinburgh, David Havelock Burn, younger son of D. H. B. Anderson, M.D., Army Medical Department.

BATTY.—On the 30th ult., at Sedbergh, Yorkshire, Bryan Batty, M.R.C.S.E. aged 83.

CULLEN.—On the 4th inst., at Carluke, Lanarkshire, William Cullen, M.D., aged 66.

DUNCAN.—On the 30th ult., at Crown-place, Aberdeen, Alexander Duncan, M.B., aged 77.

FAIRBANK.—On the 27th ult., at Doncaster, Francis Carbutt Fairbank, M.R.C.S.E., aged 70.

LANG.—On the 10th ult., at Sunnyside, Groombridge, Thomas Lang, M.D., aged 34.

LUTHER.—On the 27th ult., at Cappoquin, co. Waterford, Francis Michael Luther, M.D., aged 38.

SCRAGGS.—On the 1st inst., at Clogher, co. Tyrone, Matthew Robert Scraggs, L.K.Q.C.P.I., aged 62.

WATSON.—On the 30th ult., at Cullen, Banffshire, N.B., John Watson, R.N., Inspector-General of Hospitals and Fleets, aged 73.

WHITEMAN.—On the 29th ult., at Putney, Robert Harland Whiteman, L.R.C.P.Ed., aged 65.

WISEMAN.—On the 30th ult., at Capar, Robert Wiseman, L.R.C.S.Ed., aged 77.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

FRANCE AND HER POPULATION.

MANY causes combine to make France inferior to the other nations of Europe in the matter of population, its increase in numbers, and its maintenance of individual stamina. The question, as *The Times* pointed out the other day, affects the future of the French people very seriously. Dr. Brochard sees one potent cause of the decrease in the number of Frenchmen in the infant mortality, which has reached appalling proportions. That mortality has risen in the department of the Lower Seine to 87 per 1000; in that of the Lower Loire to 90·50 per 1000; in that of the Indre-et-Loire to 87 per 1000. Dr. Brochard has written a memoir on the subject, entitled "La Verité sur les Enfans Assistés," in which he proposes a number of reforms on the system now in force. One of these is a more rigid inspection of the nurses, which he would like to see entrusted entirely to medical men—an inspection, moreover, prolonged beyond the *premier âge*. M. Jules Simon, at a recent meeting of the Académie des Sciences Morales et Politiques, while giving a general adhesion to Dr. Brochard's views, indicated points in which they might be supplemented, and concluded by urging an immediate solution of the problem.

Mr. Kinkhead.—We never recommend a particular surgeon.

ENTOZOA OF THE ELEPHANT.

To the Editor of THE LANCET.

SIR,—In reference to the remarks of a Veterinary Surgeon which appeared in your issue of the 2nd inst, permit me to say that, owing to the politeness of Mr. Steel, the assistant demonstrator at the Royal Veterinary College, I had lately an opportunity of examining the viscera of one of the elephants that recently succumbed to the "epidemic." As I pointed out to bystanders at the time, there could be no doubt that the parasites present in the stomach and intestines of this animal were a sufficient cause of death. Not only was the colon infested by multitudes of Masuri, of the species which I have named *Amphistoma Hawkesii*, but the small intestines contained large quantities of strongyles, which the late Dr. Baird considered as new to science, and described under the name of *Sclerostoma sipunculiforme*. The nematoids also occupied cysts in the walls of the stomach and intestine, but I did not feel sure that those on the free surface of the gut were not escapes. Mr. Steel thought otherwise. Anyhow the excessive amount of ecchymosis observed throughout the alimentary tract testified to the injurious action of the entozoa of both species.

Had I not already written at considerable length on the subject of the "Destruction of Elephants by Parasites" in the pages of the *Veterinarian* for October, 1875, I should solicit space in your columns for a full exposition of what is at present known on this subject. I am, indeed, in possession of many new facts, in addition to those already recorded; but at present I must content myself with this opportunity of corroborating the general truth of the remarks made in your "Notes and Short Comments" above referred to (THE LANCET, vol. ii., 1876, p. 346).

I may add that we are now acquainted with four, if not with five, distinct species of entozoa infesting the elephant. All of them are more or less injurious; and some of the species, when present in large numbers, are undoubtedly capable of causing the death of the bearer. The Burmese and Madras epidemics afford sufficient proof of this. In the fresh condition, the Amphistomes, or Masuri, as they are called by the natives, form singularly attractive microscopic objects; their brilliant pink colour, and the tubercles projecting from the interior of their capacious ventral suckers, imparting characters that, when once seen, cannot readily be forgotten.

I am, Sir, yours truly,

Harley-street, Sept. 4th, 1876. T. SPENCER COBBOLD.

MEDICAL TEACHERS.

IN our list of Medical Teachers in the Students' Number of THE LANCET, published last week, the following (through the failure of Dr. Coales to return a form which had been sent to him) was omitted:—

Dr. Coales, LL.D., M.A., prepares candidates in Class or by Private Lessons for the following examinations: London University, Preliminary Scientific and Matriculation; College of Surgeons, Preliminary, Membership, and Fellowship; Apothecaries' Hall, Preliminary Membership. Resident Pupils received.—119, Gower-street, W.C.

P.—The best books to read for the Fellowship examinations at the Royal College of Surgeons of England are—Anatomy: Gray's last edition (second edition will not do) or Quain's. Physiology: Kirkes or Flint. Pathology: Green, with portions of Billroth. Therapeutics: Ringer or Garrod. Surgery: Bryant (last edition) or Erichsen.

Student should write to the Secretary of the University, Vienna.

SUGGESTIONS REQUIRED.

To the Editor of THE LANCET.

SIR,—I shall be glad if any of your readers will suggest a remedy for the following symptoms—viz., acute pains in the ends of the fingers and toes, shooting up the extremities, and growing worse towards evening. The patient describes them as feeling like those one experiences on the application of warmth when the fingers and toes have been benumbed with severe cold. The sufferer is a lady aged fifty years, and the pains began on the cessation of the menses—nearly three months; up to that time she had menstruated every three weeks. I may add that the patient is in good circumstances, and has been for the last six months suffering from uterine irritation; she has also an old flexion of the uterus. There is no doubt she is hysterical, but the suffering is real. Morphia only, used endermically, relieves her. Quinine, phosphorus, strychnine, arsenic, the bromides of potassium and ammonium, belladonna and aconite, faradisation, &c., have all been tried, but have failed to cure.—I enclose my card.

I am, Sir, yours, &c.,

September, 1876. INQUIRER.

ILLICIT PHARMACY IN NAPLES.

NAPLES shows signs of awakening to her sanitary duties. In the lower quarters of the city, druggists shops have multiplied like mushrooms, and dole out medicines, without the formality of a doctor's prescription, to all comers. The regular pharmacists have suffered in pocket and the public in health by these illicit interlopers, who can afford to sell their inferior wares at a cheaper rate than the vendors of a sounder article; while the mistakes inevitable on the part of ignorant and unqualified dispensers have been frequent, often grave, and sometimes fatal. Nay more: poisons of the deadliest description are freely bought and sold at these shops, which have in consequence become the suicide's resort and the homicide's arsenal. But thanks to the energy on the part of the Provincial Council of Health, which we hope to see exemplified in other departments of its duty, a raid on those irregular dealers has been followed by the imposition of strict sanitary regulations as to the quality and quantity of the articles sold as drugs, to be succeeded, we trust, by such legislation as has protected the pharmacist and the public alike in the kingdom of Great Britain.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—As an old officer of the army medical department, to which until lately I was proud to belong, I must, on behalf of those who come after me (for my army service is nearly over), protest against any such tinkering arrangement as that proposed by "A Stranger" in your issue of August 5th. Such terms of service as he proposes will never make the department worthy of England. No doubt the authorities had a difficulty in dealing with lazy, inefficient men, who just steered clear of censure, and were desirous to try some scheme that would enable them to weed the lists. At the same time the Treasury were determined to do anything to cut down the non-effective or half-pay lists—a suicidal policy, as pensions are only deferred payments. If pensions were done away with, Government would have to pay much more for medical attendance. Quite 60 per cent. of those who enter die or leave without pension, and half of the 40 per cent. who acquire pension have but a short time to enjoy it. Years ago, when quite a young man in the service, I advocated the Director-General of the department having greater power, and being able to get rid of inefficient men, and my more matured experience has only shown me that I was correct. In the time of Sir James M'Grigor and Sir Andrew Smith, an inefficient man, or one proved to be deficient in tact and qualifications for command, was kept all his service in the subordinate position of assistant-surgeon, and the superior man was promoted. It is a pity that this system had not been adhered to. Men who knew that they would not be promoted retired as assistant-surgeons on a small pension as soon as they could do so; as they did not care to serve under their more efficient and promoted juniors, the lists cleared themselves of the chaff, and retained only the sound grain.

In my opinion the system of promotion by seniority only in the executive ranks is a mistake. Under present rules (I do not mean the short-time Warrant, but that which affects the surgeons and surgeon-majors now in the service), the surgeon must become surgeon-major in twelve years, and has a certainty of 16s. 6d. retirement at twenty years. So he has no inducement to be efficient; the lazy, good for nought, and the hard-working, conscientious man being served alike. Formerly, if inefficient, he was not promoted, and could (no matter how long he served) only get the pension of the lowest grade. In these days there was a distinction between efficiency and inefficiency. In a department like ours, which must always occupy a subordinate position in the army, one essential point that should have been insisted on is, that every member of it should be a gentleman, who, without reference to his relative army rank, should command respect by his character and breeding. Open competition was fatal to this requirement. The bulk of the men in past days who entered the department were sons of old officers; poor they might be, and too often were, but they were gentlemen, in most instances loved and honoured by their brother-officers, who had not then learned to speak of a man being "only a doctor," and why, because he was also a gentleman, and "our doctor" was generally a very important man in the regiment.

A well-known and able officer of our department has advocated—

1. A pension of 1s. per day for each year's service for all executive medical officers over ten and up to twenty-five years' service. This pension for periods under twenty years to be granted by a Medical Board; over twenty years the retirement to be a right, the officer continuing to serve in the reserve, and up to sixty years of age to be available for home duties if required, thus setting free the whole active list for war service abroad. The Director-General to have the power to retire any medical officer over twenty years' service on the pension he had earned, without appeal; thus, without injustice, getting rid of men unfit for promotion to administrative rank, who, from climate or other causes resulting from service, had lost those qualities requisite for command, but who, having done good service in youth and middle age, were entitled to consideration, but not to promotion.

2. A fixed establishment of each rank; promotions to take place as vacancies occurred, and to be ruled by efficiency rather than seniority; when two or more were equally well qualified, the senior to have the preference.

3. Administrative rank only to be tenable for ten years. In special cases this period might be extended to fifteen years, the reasons for such being detailed in the *Gazette*.

4. The executive ranks to revert to the old titles—assistant-surgeon, surgeon, and surgeon-major.

5. The officers to be purely departmental, and to pay no subscriptions to bands; if attached to a regiment, to pay mess subscription only if they use the mess.

He is of opinion that if this course had been adopted there would have been a regular flow of promotion, a reserve of experienced medical officers would have been formed, and there would have been no need to raise the pay and allowances of the juniors to the extent that has lately been done. The certainty of a fair retirement to all, and of administrative rank to the most efficient and able, would have satisfied the department, and have proved less expensive in the end to the public.

Possibly you may not altogether agree with me in this view; but as many men in our service, quite unconnected with Whitehall-yard, hold similar views, I trust you will afford this letter a corner in your journal, and oblige,

Yours truly,

September, 1876. A VETERAN.

Curiosities of the Post Office.

We find in the recently published Report of the Postmaster-General that the following articles passed through the Post-office in 1875:—Silkworms and gentles, flowers, fruit and vegetables, various kinds of game, wearing apparel, models of metal fittings and toys, leeches, snails, eggs, six white mice, a sparrow, two snakes, a cray-fish, and a dog. The dog was posted at the Lombard-street office, and having fallen into the bag affixed to the letter-box, was not discovered until the contents were turned out at St. Martin's-le-Grand. A strange case of superstition in the west of Ireland is recounted. Application was made for the erection of a wall letter-box, and authority had been granted for setting it up; but when arrangements came to be made for providing for the collection of letters, no one could be found to undertake the duty, in consequence of a general belief among the poorer people in the neighbourhood that at that particular spot "a ghost went out nightly on parade." The ghost was stated to be a large white turkey without a head.

H. M. M.—Smith's Operative Surgery, published by Longmans; Somerville's Physical Geography, and any good work on Zoology.

Student.—The full period of hospital attendance must be gone through.

The late Inquest on a Lunatic Surgeon.

To the Editor of The Lancet.

Sir,—The letter of Dr. C. C. Wimberley, published in The Lancet of Sept. 2nd, is so inconsistent, so inaccurate, and so charged with admissions, it might well be allowed to pass unnoticed after the full and faithful account which you had already given in your columns of the inquest on the body of the late Mr. F. W. Wimberley. Anyone who carefully reads Dr. Wimberley's letter will see that the feelings of the writer have overcome his judgment, a condition which at this moment is not unnatural. I feel sure that as time wears on, and he is enabled to weigh the evidence with the calmness of one who is less influenced by feeling than he is at this time, he will come to the conclusion that his letter is calculated to misrepresent very simple facts, and to be injurious to others without any sufficient cause or necessity.

I would willingly—and in saying this I am speaking also for the proprietors of this asylum—have allowed Dr. Wimberley's letter to have passed without comment; but there are certain points named in it in which our honour, integrity, and professional knowledge are so called into question, we cannot let them pass. I must, therefore, crave your indulgence for sufficient space to make the following observations.

(*a*) In respect to the assumed fracture of the skull. Dr. Wimberley says that the notes of this fracture were made by himself and others, "in presence of Dr. Schofield and Mr. Pugh." He insinuates to your readers by this that I and Mr. Pugh assented to the report thus noted. He knows, and all the other gentlemen present know, that the note was made in spite of our most solemn protest to the contrary. They failed utterly to show me any fracture anywhere, or any false membrane, or any ecchymosis under the scalp "over the right occipital protuberance," and your readers will see for themselves that any such demonstration was impossible, because anatomically there is no such part as a "right occipital protuberance." Dr. Wimberley says that a portion "of the dried skull was produced at the inquest, which had been removed at the post-mortem examination in order to examine the state of the two Wormian bones which were found in the lambdoidal suture, and one of which appeared to be loosened, as it could be moved by pressure." I am forced to say that the portion of bone removed was removed in order to show the fracture (their proof of the fracture being that the right side of the skull was different to the left!—there was no Wormian bone on the left side); that the post-mortem notes made by those who removed the bone so define the fracture as to place it in the portion removed, and nowhere else; that reference to Wormian bones was never once made during the examination; and that the reason for removing and taking away the piece of skull was in order to bring it forward at the inquest as a damning evidence of a recent injury and of fracture of the skull from violence. That this was the fact was proved by the circumstance that two of the medical witnesses brought by Dr. Wimberley to the autopsy were examined on oath respecting this very portion of the skull, and that both tried to prove the fracture as existing in it. Respecting this portion of the skull I may state briefly that it was examined on our behalf by Dr. Lees, who gave evidence before the coroner, and also by another member of the profession of the highest authority, both of whom failed to discover any trace of fracture anywhere, and both of whom defined that the supposed line of fracture described in the report was a natural line of suture.

Dr. Wimberley himself admits now that the assumed fracture did not occur in our asylum, and had no connexion with the death, but occurred, he believes, when his brother fell from his horse in April last—i. e., before he entered our institution at all. This explanation is so clumsy an afterthought I need not dwell upon it. One thing is quite certain, that if the assumed fracture had been proved, with the ecchymosis "over the right occipital protuberance," it would not have been set down as occurring from an accident in April last. Ecchymosis even "over the right occipital protuberance" does not remain fresh over a fracture for three months after the infliction of the injury that caused both.

In referring to this fracture and the cause of it, however, Dr. Wimberley makes an admission which throws a great deal of light on the case. He commits himself to the statement that his brother met with a fall from his horse in April last, which might have produced fracture of the skull. It is clear from this that a fall so severe might equally have produced fracture of ribs, a point which the published reports of the inquest do not set forth.

(*b*) In respect to the fracture of the sternum, my notes made at the first autopsy, and Dr. Lees' observations at the third, both confirm that an attempt at repair had been going on in the sternum. Dr. Lees' opinion was that the fracture was at least three weeks old. Mr. Ingoldby also admitted that pathological changes resembling caries were progressing in the fractured ends of the bone, so that the hypothesis that this fracture was connected with the collapse that led to the death is altogether untenable. The existence of the fracture was reported by me the moment it was discovered, and also reported by me to the coroner before the post-mortem examination as a reason for holding the autopsy and inquest, thereby showing we were anxious for the proper judicial inquiry to be held. Indeed it is but justice now for me to add that I made the report to the coroner respecting it in opposition to the wishes of one of the relatives and friends of the deceased with whom I had communicated.

The most serious part, however, in Dr. Wimberley's letter occurs in the succeeding sentence, where he refers to an abscess in the deceased gentleman, which lay in communication with the fracture of the sternum, and which I opened and emptied of its contents in the presence of four witnesses. I let out of that abscess at least two ounces of purulent matter, completely emptying the cavity; yet, because he and his colleagues did not find in a subject undergoing rapid decomposition a sac containing pus, Dr. Wimberley wants to discredit my act altogether, and throws out some innuendo that the external puncture I made into the abscess had a reason which "must be matter for conjecture."

For my part I found the ununited ends of the sternum bathed in pus at the first autopsy, and Dr. Lees discovered pus at the same points at the third post-mortem examination which he conducted, and, on more careful examination, he also pointed out the abscess cavity in which the pus had been contained. In fact, the existence of an abscess is out of the range of honest dispute. And Dr. Wimberley's conjecture of any reason beyond the simple facts as they were can rest on no other foundation than a desire, at all risks, to suggest something that shall convey a painful and prejudicial reflection on myself. Fortunately for me the animus of the writer destroys his credibility.

(*c*) In respect to the fracture of the ribs. Our aim has been to obtain the fullest truth on the whole subject, to determine the nature of the fractures, their extent, and, as far as ever we could, the dates of their occurrence.

On our part Dr. Lees examined carefully all the fractures, and described them at the inquest. In addition, we had four of the fractured ribs submitted to microscopical examination by an eminent authority, and the conclusion we came to, which was fully sustained at the inquest, was twofold—first, that the ribs were undergoing that pathological change leading to extreme brittleness which does occur in some cases of general paralysis of the insane; and secondly, that the ribs showed evidence of fractures extending over a long period of time. We did not deny that some of these fractures might have occurred during the time the patient was under our care, though we could not discover the circumstances under which they were produced; but we maintained, and still maintain, that many of them, and I think I may say the greater part of them, were antecedent to the introduction of the patient into our institution. The report we received on the four ribs that were submitted to microscopical examination, which we were prepared to put in in evidence if it had been required, was singularly illustrative. It stated that one rib had been fractured and united, with the absorption of callus, showing it to be a united fracture several months old at least; another was fractured with partial absorption of callus, a fracture also of several months' standing; another had been fractured three times at the same spot, with two distinct deposits of callus, showing that there had been an original fracture of the rib, an after fracture of callus at the part, formation of new callus over the old, and again a fracture of new callus—a series of changes all of which certainly did not take place in the nine weeks the patient was in our house. It was further discovered that in another rib found broken, the breakage was through callus, that the ends of the rib had been solely supported by this callus, and that the two ends of the bones, ununited within the callus, had undergone a process of exfoliation and disintegration. In this instance, if the callus were fractured within the nine weeks, it is certain the bone was not originally, for the callus had undergone organisation, and an imperfect vascular system was found in it, indicating a stage of repair extending at least over a period some time previous to the admission to the asylum. In a word, we received in the late Mr. Wimberley a patient in whom very slight accidents would produce fracture of the ribs, and our explanations extend no further than that injuries, accidental, self-inflicted, or intentionally inflicted by others, would all explain, and equally explain, the conditions found after death. We contend that some of these accidents were in progress before we became in any way responsible for the treatment of the case.

The statements made by Dr. Wimberley that his brother had never sustained any fractures of the ribs previous to his admission to the asylum, except two which he got nine years ago, must be taken with these explanations. It is perfectly certain that his dogmatic assertion on this point cannot be accepted. He offers no evidence on the question at all. At best his is only an opinion based on the statement "that he had been for several years in communication with his brother"—a statement which conveys no proof of examination or inquiry on the particular subject before us, and which, with the results of the post-mortem examination in view, is clearly fallacious.

(*d*) The immediate cause of the death of Mr. Wimberley was peritonitis. The cause of the peritonitis I inferred to be, from my first examination, pyæmia, from absorption of purulent matter. An external abscess on the back of the left hand, and one in the palm of the right, taken in connexion with the abscess in the breast, prompted this inference. I candidly admit, and from the first I have candidly admitted, that on this point I was wrong. The second autopsy revealed the opening by ulceration of the stomach into the peritoneal cavity—a lesion which I had unfortunately overlooked from the fact that I had not examined the stomach at all owing to the existence of peritonitis, which I thought sufficiently accounted for death. This perforation of the stomach accounted for all the symptoms of collapse. The symptoms of ulceration of the stomach had been presented during life, and but for the maniacal condition of the patient would, no doubt, have been diagnosed. He frequently vomited, and the symptoms of fatal collapse followed the vomiting of a hearty breakfast. The other symptoms of vomiting dark fluid and coffee-ground fluid were strikingly diagnostic; and the pathological appearances of the ulcer itself (situated in the most common position—namely, at the posterior part of the lesser curvature), the recent peritonitis, and the existence of fluid in the peritoneal cavity, are all unmistakable signs of the actual and natural cause of death. There was no evidence whatever of the rupture of the stomach having been caused by violence; and the medical witnesses who were opposed to us, though they assumed violence as the cause of the peritonitis, and assumed that the rupture of the peritoneum covering the stomach was post mortem, or that the rupture, if it did take place, took place from violence, were, one and all, driven to admit that the rupture without violence was in accordance with

experience, and that the symptoms, according to the best authorities, were compatible with the natural course of disease from perforation.

(c) Dr. Wimberley finally impugns the view that his brother was suffering from the general paralysis of the insane. He does not tell us for what reason his brother was placed in an asylum. He does not define what the form of insanity was, and he clearly has a very limited knowledge of the subject of the progressive palsy of the insane. I need only say that the patient was suffering from acute mania, with elated notions, emotional paroxysms, exacerbations of excitement, tremulous tongue, irregular pupils, and defective articulation in the case of many words, to prove to all men who understand psychological medicine the true nature of his disease. I could add further evidence if it were necessary, but this is sufficient. In the many hundred cases of paresis that have been under our care, we never had one more typical, and a few days after admission it was certified to the Commissioners in Lunacy accordingly. But let the reader mark Dr. Wimberley's statement as to his brother's disease. He says that if the disease, general paralysis, did not exist at the time of his death, "it would most probably have come on had he lived a while longer."

Such are the medical facts connected with this unfortunate case.

At the inquest, two patients of the asylum, who were brought forward by me as persons able to give evidence, and on whom fair reliance could be placed, even though they were subject to fits, stated that on a Friday, about the middle of May (the 19th), one of the under attendants, by the name of Smith, kicked Mr. Wimberley in the side. I thought it just to say that, with caution, the evidence of these patients might be taken. I do not impugn its correctness, and Smith has since been fined by the Lambeth magistrate £20, or three months' imprisonment.

In the conduct of the investigation into this sad case, our own course has been clear and decisive throughout. We have offered every facility we could to discover the facts; indeed all the information that has been obtained about the case has come from us. It is our duty as well as our interest to suppress instantly every fault committed by our attendants, and we should ourselves be the first to prosecute any attendant whom we knew to be guilty.

As you have stated in your report, it has been the policy of our asylum to give to every patient under our care all the liberty that is compatible with their condition, and our policy in this respect has been founded on the experience that the maintenance of such freedom is the best possible treatment for promoting the comfort and cure of those in our charge. To us Mr. Wimberley's case was exceptional in its violence, in the difficulty of its management, and in the condition of the patient himself in so far as his proclivity to fracture was concerned, and any injury which happened to him while he was under our care is not the less to a subject of very deep regret.

I remain, Sir, your obedient servant,

Camberwell House, Sept. 5th, 1876. FRANK SCHOFIELD.

W. F. S.—1. Yes, if directed so to do by the Board of Guardians; and, under any circumstances, it is desirable that he should, as a matter of courtesy, do so.—2. Umbilical.

Dr. Day, (Stafford.)—It shall be published at a very early date.

POST-PARTUM ENCUMBENCY.

To the Editor of THE LANCET.

SIR,—This most important subject was mooted by Dr. Tilt in THE LANCET of Aug. 12th; and it is highly desirable, both for practitioners and patients that some certain rules for guidance should be laid down regarding the length of time it is desirable for patients to observe the recumbent posture after delivery.

In many cases where, previous to pregnancy, treatment had been necessary on account of subinvolution or displacement of the womb, or both, I have enjoined prolonged rest after delivery, hoping thereby, with appropriate constitutional treatment, the patient would rise with a womb healthy both in structure and position; but in every case I have been grievously disappointed, and compelled eventually to employ specific local treatment. On the other hand, cases are occasionally reported where, apparently, for want of proper rest, serious if not fatal results have ensued.

Dr. Goodall, as quoted by Dr. Tilt, observed no ill results, but the contrary, in 700 cases where the patient was allowed to sit in a chair the next day, and move about as soon as she pleased. A lengthened experience among the natives of Java did not lead me to estimate puerperal complications greater than among their European sisters, although they frequently bathe in the rivers immediately after labour, and pursue their ordinary avocations the same day. Few practitioners, I believe, allow their patients to move about earlier than the tenth day; many not before the twenty-first; while you often hear of nurses boasting that "their ladies" go about the second or third day. Who is right?

Another subject lately discussed is the ill effect of hypodermic injections, such as quinine and other agents, in causing boils, abscesses, or sloughs. Does not this depend upon the operator? If the needle be thrust deep down among the tissues, unpleasant effects will seldom arise; but if, as in our original instructions, the dermis be raised and the needle only traverses the cellular tissue immediately beneath, then abscess and sloughing will often result. This fact was particularly noticed in a patient in whom I often injected ten or fifteen minims of chloroform, getting as near the sciatic nerve as possible, no other plan giving him any relief. Once in my absence a medical friend injected the chloroform subcutaneously, and a most painful slough was the result.—Yours faithfully,

RICHARD NEALE, M.D. Lond.

Boundary-road, St. John's-wood, Aug. 29th, 1876.

Mr. Pullin.—We cannot find the newspaper cutting to which our correspondent refers. Why not write to the office of the paper for a fresh copy?

WHAT IS A MODERATE USE OF STIMULANTS?

To the Editor of THE LANCET.

SIR,—As a good deal has been said and written lately about the habit indulged in by ladies of consuming an excessive quantity of stimulants, you will oblige very much if you will say what quantity of wine (stated in ounces) might be taken, not only without detriment, but with advantage, to the health of an individual in good condition, who, being of an active, busy, anxious temperament, cannot become a total abstainer.

I remain, Sir, yours obediently,

September, 1876. A VERY TEMPERATE LADY.

*** Our correspondent will find that we have dealt with the subject in another column.

UNIVERSITY OF DURHAM.

OWING to returns for the Students' Number of THE LANCET from this University having miscarried, we would this week draw attention to the following alterations which have been recently made, and which are of considerable importance to the student:—1. No residence in Arts at Durham or Newcastle is now required. 2. The M.B. and C.M. can now be obtained at the end of the fourth year of medical study. 3. Certain examinations in Arts are accepted by the University in lieu of the equivalent B.A., which was formerly necessary for the degree of M.B. 4. The M.D. can now be obtained two years after the M.B.—i. e., six years after registration,—provided the candidate is twenty-four years of age.

Mr. A. Morrison.—The letter shall receive attention.

A HOME OF REST FOR NURSES.

To the Editor of THE LANCET.

SIR,—Rather more than a year ago, a paragraph appeared in THE LANCET announcing that a benevolent lady was desirous of establishing a Home of Rest for Nurses, and was prepared to give a goodly sum of money annually towards the support of the institution. Although the proposal was highly commended by you and your contemporaries, and was made known far and wide, the scheme was not so warmly supported as it deserved to have been, and the result is that as yet the permanent home has not been established. However, I wish to make it known through your columns, if you will allow me, that this same lady now offers a home, near the sea, free of expense for the next two or three months, to nurses who are in want of change and rest, and who have not the means of obtaining them for themselves. Those who desire to avail themselves of this offer should address C. M. W., Headston House, Harrow, N.W.—I am, Sir, yours obediently,

The Hawthorns, Finchley, Aug. 29th, 1876. ALFRED WRIGHT.

INDIAN BEER AND INDIAN TEA.

WE learn that the Government of India is actively encouraging the use of Indian beer and tea in the army. The *Times of India* hopes "that the troops all over India will gradually learn to rely for their liquor both for that which cheers and that which inebriates on the resources of the country. They get a better article by so doing, especially in the case of their beer, because the voyage out often spoils English beer; while the Indian brewers offer theirs on approval at the canteens, and any bad barrels would be at once withdrawn." We believe that good beer is the best alcoholic drink for the European in India, and the predilection for it of those not used to it at home, and whose incomes enable them to command an ample supply of choice wines, is curious.

ATROPINE SOLUTION.

To the Editor of THE LANCET.

SIR,—Can any of your readers tell me how to preserve the Liq. Atropiæ Sulph. P.B. from decomposing. If spirit be added, it is very irritating. It is excessively inconvenient to have to make a solution of this salt in a hurry; moreover, the salt itself does not keep well.—Yours faithfully,

Seaford, Aug. 28th, 1876. B. J. TUCK.

Quivis-grayse. — Ganot's Physics; Roscoe's and Fowne's Chemistry; Oliver's or Balfour's Botany; and Nicholson's Zoology.

Mr. W. S. Russell.—We do not know of such an institution.

MILITIA MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Without going into our palpable grievances, I ask (through you) my militia brethren what conjoint and immediate action can be taken in enforcing our just claims? I am unfortunately at a brigade depôt, and am, in consequence, about to be turned adrift with only a twenty-seven days' training, which is quite inadequate to repair current and in many cases permanent loss from private practice during the period.

I also want to know what is the full interpretation of the word "departmental," and whether by clutching at the small bait of the additional 2s. 6d. a day I thereby lessen or impair any future claim for pension or gratuity. I shall be glad to join in any concerted action for obtaining what is plainly our due. This, I opine, can be best done through our parliamentary representatives at the proper time, and I have had already several promises that our claims shall have favourable consideration when brought forward.

I am, Sir, yours obediently,

September, 1876. MILITIA SURGEON.

VIVISECTION.

THE Secretary of one of the metropolitan hospitals sends us the following letter which he has received in answer to an appeal for funds:—

"SIR,—I much regret to say that in consequence of the attitude assumed on the vivisection question by a portion of the medical profession, which may be called the hospital portion of the profession, I, and others who think as I do, will feel obliged, not only to abstain from subscribing to any hospitals to which we have not hitherto subscribed, but even to withdraw our subscriptions from several of those to which we have for some years contributed.—I remain &c., "———."

A Subscriber.—There is no special institution for the reception of a "bad case of erysipelas in the leg." The man should obtain a letter of recommendation to a general hospital.

Intermittens.—Letter received.

ULCERATED LEGS.

To the Editor of THE LANCET.

SIR,—I think, if your correspondent "Nemo" will give a trial to terebene as a dressing for ulcerated legs, he will have no reason to regret the experiment. It may be painted on by means of a camel's-hair pencil, or lint or linen steeped in it may be laid on the ulcerated surface. In indolent ulcers its effects are very remarkable in producing healthy granulations. I have myself witnessed some most striking results from its use. Not the least recommendation in its favour is its high deodorising power, the most offensive wounds becoming free from odour when dressed with it. It will be found quite as efficacious as hydrate of chloral for the above purpose, and considerably cheaper. It may be obtained of any chemist.—Yours, &c.,

Gloucester, Aug. 30th, 1876. FRANCIS T. BOND, M.D.

H. H.—A L.R.C.P. Ed. has no right whatever to style himself "Dr.," and the College in question now distinctly discourages such a practice on the part of its licentiates. At the same time our correspondent is wrong in assuming that the practice is illegal, whatever it may be morally.

Mr. F. R. Chapman.—Certainly not, without previous communication with the practitioner in attendance.

Dr. Swift Walker.—We cannot open our columns to the grievance.

R. H. B.—At any of the medical publishers.

M.B. Edin.—1. See the answer given to "P."—2. Dalby or Allen.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Acland, Salcombe; Dr. Sedgwick Saunders, London; Dr. Aveling, London; Mr. Maunder, London; Mr. E. Johnson, London; Mr. Forbes, Glasgow; Dr. Leared, London; Mr. Wetwan, Cheltenham; Mr. Eade, Swansea; Mr. Cuthbert, Glasgow; Mr. Purvis, Greenwich; Mr. Pullen, Sidmouth; Dr. Roy; Mr. Black, Portsmouth; Mr. Thomson, London; Mr. Duncan, Glasgow; Surgeon Lucas, Neemuch; Mr. Waugh, Cuckfield; Dr. Bruges, Paris; Dr. Headley, Melbourne; Dr. Hocken, Dunedin, New Zealand; Dr. Weiss, Neuilly; Dr. Dabbs, Newport; Mr. Mart, Madras; Mr. Tyte, Minchinhampton; Mr. Curme, Blandford; Mr. Willoughby, Canonbury; Mr. Jackson, Wolverhampton; Mr. Prideaux, Derby; Mr. Bland, Rochdale; Dr. Roberts, Philadelphia; Mr. Young, Aldershot; Mr. Lilley, Coventry; Mr. Ellis, St. John's-wood; Mr. Boyes, Brighton; Mr. Barras, Rotherham; Dr. Beverley, Norwich; Mr. Bramwell, Newcastle-on-Tyne; Dr. Taylor, Nottingham; Mr. Hodges, Leicester; Mr. Binks, Wakefield: Mr. Ingpen, London; Mr. Williams, Duppas Hill; Mr. Waldron, Cardiff; Mr. Gamgee, Grange-over-Sands; Mr. Blake, London; Mr. Wartenburg, Manchester; Mr. Turner, Hythe; Mr. Hawthorn, Uttoxeter; Mr. Lovell, St. John's-wood; Dr. Thursfield, Shrewsbury; Mr. Cannell, Hertford; Dr. Holden, Sudbury; Mr. Kinkhead, London; Dr. Cobbold, London; Mr. Monson, Canonbury; Mr. Clayton, Accrington; Mr. Wrightson, Swallowfield; Mr. Taylor, Long Sutton; Dr. Tonmasten, Knightsbridge; Mr. Snoad, Yoxall; Mr. Elliot Hall; Mr. Middleton, Birmingham; Mr. Farnell, Liverpool; Mr. Holden, Liverpool; Mr. Heaton, London; Dr. Bennett, Wilton; Dr. Medlicott, Wells; Dr. Atthill, Dublin; Mr. R. H. S. Carpenter, London; Dr. Cuolahan, London; Mr. Russell, Liverpool; Mr. Ashburner, Horsham; Dr. Bradburn, Bridlington; Dr. Egan, Arroye, Porto Rico; Dr. Orchard, Pendleton; Mr. Hughes, Bala; Mr. Turner; Dr. Collier, Hammersmith; Mr. W. H. B. Crofts, Kettlewell; Dr. Day, Stafford; Dr. Clarke, Neuilly; Mr. Young, Bridgwater; Dr. Jones, Blackpool; Rev. Mr. D'Orsey; Mr. Butler, Guildford; Mr. Fairbank, Doncaster; Dr. Clark, Crieff; Mr. H. Mead, Christchurch; Dr. Barnes, Eye; Dr. W. M. Burke, Dublin; Mr. Tait, Birmingham; Dr. Chapman, Halifax; Mr. Franklin, Leicester; Dr. Williams, Talgarth; Dr. Fox, Clifton; Mr. Eastwood; Dr. Ransom, Sunderland; Dr. Redmund, Rhymney; Dr. Smith; Mr. Knight; Dr. Taxford, Boston; Mr. Bell; Professor Pacchiotti, Turin; Dr. Munro, Army Medical Department; Dr. Dyson, Sheffield; Mr. Hinds, Birmingham; Dr. Oliver, Preston; Dr. Harvey, Dublin; Mr. Collingridge; Dr. Madden; Dr. Lewis, Basingstoke; Dr. Alexander, Bradford; Dr. Walker; Dr. Thirkell, Grimsby; Mr. Scott; Mr. W. Chater; Dr. Thomas, Glasgow; Mr. Wylie, Belfast; Dr. Easby, March; Mr. Bremner, Penge; Dr. MacRae, Hawick; Dr. Reilly; Mr. Russell, Denmark-hill; Mr. Harrison; Dr. Jones, Dolgelly; Dr. Edis; A. W. P.; A Subscriber; L. B.; M.D. Giessen; J. R.; An Unbeliever; Fides; Studens; M.B. Edin.; P.; A M.D.; Monomania; Enquirens; Quic-en-grogne; A. T., Sheffield; E. T.; Palmam qui meruit ferat; M.D.; Surgeon-Major; Professional Etiquette; The Secretary of the Zoological Society; Observer; The Committee of the Crystal Palace Company; T. L.; Alpha; X. B. C.; Inquirer; Intermittens; M.R.C.S.E.; A. B., Derby; &c.

LETTERS, *each with enclosure*, are also acknowledged from — Dr. Davies, Bryngolwg; Messrs. Grace, Bristol; Mr. Ramsden, Halifax; Dr. Jones, Hulme; Mr. Fagan, Wells; Mr. Roocroft, Wigan; Mr. Parker, Caistor; Dr. Plumer, Snaith; Mr. Lindsay, Aberdeen; Mr. Whalley, Bradford; Mr. Gillespie, Paisley; Dr. Palmer, Mount Sorrel; Mr. Elliott, Manchester; Mr. Roberts, Smethwick; Dr. Smith, Burgess Hill; Mr. Eberle, Easingwold; Mr. Dixon; Mr. Williams; Mr. Ward; Mr. Roberts, Attercliffe; Mr. Erskine, Newry; Mr. Hall, Preston; Mr. Morton, Brightside; Mr. Todd, Selby; Mr. Lance; Mr. James, Cwm Avon; Mr. Barnes; Dr. Murphy, Cahir; Mr. Newington, Tattlebury; Mr. White; Dr. Martin; Mr. Patrick, Christchurch, New Zealand; Rev. D. Downing, Leeds; M. A.; Y. Z. A.; N. and P., Islington; Medicus, Dublin; Peregrinus; Medicus, Denbigh; W. F. H., Bishops Stortford; H. W., Richmond; M. D. C.; A. V., Guildford; Medicus, Mottram; R. S., Cherburg; A. M. D., London; A. H., Wainfleet; R. S. T.; Medicus, Highfield; M.D., Tring; H. A. B., Selby; Medicus, Llandovery; M.R.C.S., Stafford; Medicus, Milford Haven; M. E., Oldham; Alpha, Hull; S. F.; X., Scarborough; X. Y. Z., Manchester; L. R. C. P., Whickham; W. X., Exeter; M.D.; Scalpel, Glasgow; E. T., Alfreton; B. G. H.; J. C. H.; Optimus; B., Bristol; E. A. W., Rhyl; X. Y.; Medicus; A. B.; E. H. C.; Zeta, Faversham; D. W., Middlesborough; Alpha; J. B., Oldham; L. R. P., Wickham Market; Beta; A. B. C., Paddington; N. L. F.; A. B., Lincoln; R. G.; X. Y. H.; X., London; Medicus, Walworth; Theta.

Australian Medical Journal, Melbourne Argus, East Coast Times, Western Morning News, Shrewsbury Chronicle, Blackburn Times, Surrey Advertiser, East London Observer, Manchester Guardian, Cork Constitution, Tunbridge Wells Gazette, Newcastle Chronicle, Buxton Advertiser, Metropolitan, Northampton Herald, Preston Guardian, and *Hastings and St. Leonard's Independent* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, SEPT. 14TH, 1876.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Sept. 8	29·70	W.	51	55	96	64	49	0·08	Cloudy
„ 9	29·79	W.	60	63	91	62	46	0·01	Bright
„ 10	29·77	N.	51	58	94	63	52	0·14	Overcast
„ 11	29·81	N.W.	50	55	91	60	49	0·05	Cloudy
„ 12	29·88	N.E.	50	52	82	59	48	...	Overcast
„ 13	29·80	N.W.	48	52	68	55	45	...	Cloudy
„ 14	29·79	N.	51	54	...	61	50	...	Cloudy

Medical Diary for the ensuing Week.

Monday, Sept. 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Sept. 19.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Sept. 20.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Sept. 21.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Sept. 22.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 23.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

TERMS OF SUBSCRIPTION TO THE LANCET.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year ..... £1 12 6 | Six Months £0 16 3

TO THE COLONIES AND INDIA.

One Year £1 14 8

Post Office Orders in payment should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable to him at the Post Office, Charing-cross.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under ..... £0 4 6 | For half a page £2 12 6
For every additional line ... 0 0 6 | For a page 5 0 0

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.

N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—

Mons. DE LOMINIE, 308, Rue Grenelle St. Germain, Paris.